

**CITY OF PORTLAND**

**FORMER PROPERTY**

**CRAWFORD STREET**  
**(BRAND-S ACQUISITION)**

**USEPA SF**



**1330075**

**0076419**  
**COP/EPA 104(e)**



**CITY OF PORTLAND**  
**ENVIRONMENTAL SERVICES**

1120 SW 5<sup>th</sup> Avenue, Room 1000, Portland OR 97204-1972

(503) 823-7044 FAX (503) 823-6995

**MEMORANDUM**

## **Crawford Street Properties**

TO: Linda Scheffler  
COPIES:  
FROM: John Hazlett  
DATE: 10/5/06

### **Storm Connections**

City Plumbing records show two connections to the city's stormwater conveyance system. Roof runoff from the Columbia Forge office building on the North Area's west end (along Burlington) discharges to the MS4 in N. Burlington. Roof runoff from the Columbia Forge operations building along N. Crawford discharges to the MS4 in N. Crawford. Additionally, the Lampros Steel building along N. Crawford (on the east side of the property next to the vacant area) has two connections to the MS4 in N. Crawford, as shown in the BES Mapping system (no plumbing records exist for this connection). All of the MS4 connections described above drain to City Outfall 52.

### **Additional Drainage Info**

Historically, Source Control field inspections revealed some stormwater drainage from Crawford St. properties discharges onto the railroad tracks that separate the north and south areas and the neighboring WPCL property. Union Pacific has since raised the tracks along the Lampros Steel and WPCL properties, which may affect this issue.

A few years ago Lampros paved the NW corner of their property (closest to the river), which slopes down to the fence and drains to a WPCL swale. See 2/14/06 email correspondence from Cloudy Sears. This is consistent with the WPCL document depicting runoff coming onto the lab property from the Lampros property.

Catch basins in the Columbia Forge operations area convey runoff from the property and the upland corridor to a sand filter/planter at the southern end of the operations area. Planter overflow discharges to a city catch basin in Burlington that flows to City Outfall 52.

Finally, two private outfalls (WR-187 and 188) exist on the south area of the property, and it's unclear if Crawford Street properties are contributing to these.

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**Site History**

In 1997, following a joint inspection by BES and DEQ to evaluate operational areas subject to NPDES permit coverage, ISW asked Columbia Forge to address cooling water discharge and fugitive oil products as well as install filters in the catch basins on their property.



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1120 S.W. 5th Ave., Rm. 400  
Portland, Oregon 97204-1972

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**Environmental Survey**  
**Wastewater Generating Characteristics**

SOURCE CONTROL MANAGEMENT

LEAVE BLANK City Use only

Date Received: \_\_\_\_\_

Treatment Plant: \_\_\_\_\_

Service Area: \_\_\_\_\_

Pump Stations: \_\_\_\_\_

Sewer Node: \_\_\_\_\_

Please complete in full, either typed or printed clearly.

**SECTION A - GENERAL INFORMATION**

A1. Company name: COLUMBIA FORGE + MACH. WKS. INC

A2. Division name: \_\_\_\_\_

A3. Address of the facility: 8424 N. CRAWFORD ST.  
PORTLAND, OR 97203

A4. Mailing address: SAME

A5. Representative completing this form:

Name VINCE SCHILE

Title GEN. MGR.

Telephone 286-3621 FAX 286-5258

A6. Brief description of business--principal products and services:

STEEL FORGINGS

A7. Is the building currently connected to public sewer system? ☒ Yes ☐ No  
If no, have you applied for a sewer connection? ☐ Yes ☐ No  
Estimated date of connection \_\_\_\_\_

A8. Standard Industrial Classification Number(s) (SIC Code if known).

3462

A9. Do you or will you discharge oils, grease, or fats to the public sewer? ☐ Yes ☒ No

A10. Do you use any of the following devices?

a. Oil and water separator. ☐ Yes ☒ No  
b. Oil and Grease trap. ☐ Yes ☒ No  
c. Sand/sediment trap. ☐ Yes ☒ No

A11. How often do you clean the oil and grease trap? Where do you dispose of trapped oil and grease?

A12. Do you or will you have chemical storage containers, bins, or ponds at your facility? ☒ Yes ☐ No  
Do you have any underground storage tank(s)? ☐ Yes ☒ No

A13. Have you been issued a local, state, or federal environmental permit? ☐ Yes ☒ No  
If yes, please list the type of permit(s). \_\_\_\_\_

A14. Do you or will you have floor drains in your manufacturing or storage area? ☐ Yes ☒ No  
If you have chemical storage containers, bins, ponds, or floor drains in a manufacturing or storage area, could an accidental spill lead to a discharge to an onsite disposal system (e.g., through a floor drain)? ☐ Yes ☒ No  
To a public sewer? ☐ Yes ☒ No  
To a storm drain? ☐ Yes ☒ No  
To ground? ☒ Yes ☐ No

A15. Do you or will you discharge wastewater (other than domestic waste from bathrooms, toilets, etc.) to an onsite disposal system? ☐ Yes ☒ No  
To a storm sewer? ☐ Yes ☒ No

A16. Do you or will you discharge wastewater (other than domestic waste from bathrooms, toilets, etc.) to the public sewer system? ☐ Yes ☒ No

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature\*

Vince Schile

Title

Gen. Mgr.

Date

8-6-92

ENTERED  
PLH

# Environmental Survey Instructions

Instructions for Completing Page A1

## Section A--General Information

- A1. Enter the name or title of your business.
- A2. Enter the division name, if applicable.
- A3. Enter the address of the facility discharging to the City's sewer system.
- A4. Enter mailing address if different than A3.
- A5. Give the name of the person who is thoroughly familiar with the facts reported on this form and who can be contacted by the City staff.
- A6. Give a brief description of the facility. Include products or services.
- A8. Include all numbers that apply to business. Leave blank if not known.
- A13. Types of environmental permits to list include but are not limited to air, hazardous waste, NPDES for discharges to surface waters.
- A16. Process wastewater could be discharged through a direct connection to the City's collection system or through floor drains.

\*This form should be signed by a responsible corporate officer, a general partner, or by a duly authorized representative. See 40 CFR 403.12(1) for full definition.





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BUREAU OF ENVIRONMENTAL SERVICES

# Environmental Survey

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## SECTION B - DETAILED WASTEWATER INFORMATION

Company Name COLUMBIA FORGE & MACH. WKS. INC.  
Facility Address 8424 N. CRAWFORD ST., PORT, OR 97203

B1. Please describe processes to be used in your facility that will result or may result in wastewater discharge to the public sewer system.

NONE

B2. This facility generates or will generate the following types of wastes (check all that apply):

	Average gallons per day	Peak gallons per day
<input checked="" type="checkbox"/> Domestic wastes (restrooms, employee showers, etc., Estimate 35 gallons per day for each employee)	<u>525</u>	<u>525</u>
<input type="checkbox"/> Cooling water, noncontact		
<input type="checkbox"/> Boiler/Tower blowdown		
<input type="checkbox"/> Cooling water, contact		
<input type="checkbox"/> Process		
<input type="checkbox"/> Equipment/Facility Washdown		
<input type="checkbox"/> Air Pollution Control Unit		
<input checked="" type="checkbox"/> Stormwater runoff to sewer	<u>UNKNOWN</u>	<u>UNKNOWN</u>
<input type="checkbox"/> Other (describe)		
<input type="checkbox"/> Cleanup		

Total

Time and Duration of Discharge:

Cleanup Time:

B3. Products Produced: (Attach additional sheets as necessary)

Type	Amount and Rate of Production	Process
	<u>STEEL FORGINGS</u>	

B4. Water supplied from: (Best estimate if not metered)  
(City, Well, etc.)

Water Source(s)	Water Acct No.	Water Quantities*
		Estimated Meter
a. <u>CITY</u>	<u>0760031031 M 0166</u>	<u>200</u> gal/day
b. <u>CITY</u>	<u>0760030068 M 0166</u>	<u>374</u> gal/day
c.		

\*1 ccf = 748 gallons

Total

574

B5. Wastes are discharged or may be discharged to: (check all that apply)

	Average gallons per day	Peak gallons per day
<input checked="" type="checkbox"/> Sanitary sewer	<u>574</u>	<u>574</u>
<input checked="" type="checkbox"/> Storm sewer	<u>UNKNOWN</u>	<u>UNKNOWN</u>
<input type="checkbox"/> Surface water		
<input type="checkbox"/> Groundwater (onsite disposal)		
<input type="checkbox"/> Waste haulers		
<input type="checkbox"/> Other (describe)		

Total

574

574

Are the discharges batch [ ]? continuous ☒?

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Instructions for Completing page B1

B2. Provide the daily average and peak flows of waste generated in gallons per day for the last 12 months. The average flows can be calculated by dividing the total flows (of last 12 months) by the number of days that a discharge of water occurred (or operating day).

- For estimating sanitary flows, use 35 gallons per each employee.

Include the day(s) of the week and duration (length of time) of discharge to the sewer system. Include day(s) of the week and approximate time for normal cleanup activities.

B3. List the types of products, giving the common or brand name. Enter from your records the amounts produced daily for the previous calendar year and the process used.

B4. Provide the water source(s) from which you get your water if there is more than one source, list each source. Provide the water account number. If the source is City water. To convert quantities from your water bill in CCF to gallons per day (gal/day), multiply CCF by 748.

B5. Estimate wastewater discharge quantities.

B6. "Are any liquid wastes or sludges from this firm disposed of by means other than discharge to the sewer system?"  
☒ Yes ☐ No If "no," skip Items B7 and B8; If "yes," complete items B7 and B8.

B7. These wastes may best be described as:

Item No.	Estimated gallons or pounds per year
<input type="checkbox"/> Acids	
<input type="checkbox"/> Alkalies	
<input type="checkbox"/> Heavy metal sludges	
<input type="checkbox"/> Inks/dyes	
<input checked="" type="checkbox"/> Oil and/or grease	500 GAL
<input type="checkbox"/> Organic compounds	
<input type="checkbox"/> Paints	
<input type="checkbox"/> Pesticides	
<input type="checkbox"/> Plating wastes	
<input type="checkbox"/> Pretreatment sludges	
<input checked="" type="checkbox"/> Solvents/thinners	750 LBS.
<input type="checkbox"/> Other hazardous wastes (specify)	
<input type="checkbox"/> Other wastes (specify)	

B8. For the above checked wastes, does your company practice:

☒ Onsite storage  
location YARD STORAGE BLDG.

☐ Offsite storage  
hauler's name \_\_\_\_\_  
address \_\_\_\_\_  
hauler's DEQ permit # \_\_\_\_\_  
phone number \_\_\_\_\_

☐ Onsite disposal

☒ Offsite disposal  
hauler's name SAFETY-KLEEN CORP. (SOLVENT)  
address 550 SHELLY ST. SPRINGFIELD, OR  
hauler's DEQ permit # EPA ID # 39-6090019  
phone number (503) 655-5798

SPENCER ENVIRONMENTAL SERVICE (OIL)  
15770 SO. BEAVER CREEK DR. OREGON CITY, OR  
EPA ID # ORD 980836415  
(503) 655-0896

Describe the method(s) of storage or disposal checked above.

FOR RECLAMATION

Do you have an EPA or DEQ permit for storage or hauling? ☐ Yes ☒ No If yes, attach a copy of the permit.

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Instructions for Completing page B2

B6. Answer yes or no.

B7. If the answer to B6 is yes, describe the types of wastes.

B8. If the answer to B6 is no, describe your storage and disposal practices for these wastes. An onsite disposal system could be a septic system, lagoon, holding ponds (evaporative-type).

- A batch discharge is one which results from the draining of storage tanks or process tanks; intermittent boiler blowdown, etc.

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- B9. List all principal materials regularly used in your facility that may be present in your wastewater discharge (such as cleaning agents, solvents, food processing waste, plating solutions, catalysts, milk wastes, ink, etc.). Identify chemical constituents, if known, or brand name. Attach material safety data sheets.

Generic Type	Amount Per Year	Discharged to		Spill Potential		Chemical Constituents or Brand Name
		Storm	Sanitary	Storm	Sanitary	
a. Example: Degreaser	3 gallons			X		Trichloroethylene
b.						
c.						
d.						
e.						
f.						
g.						
h.						
i.						
j.						
k.						

(Attach additional sheets if necessary)

- B10. Have you listed with the Fire Bureau the onsite storage of flammable or combustible liquids or solids, hazardous chemicals, or radioactive materials?

☒ Yes ☐ No

If yes, list materials, if any, and their scientific or common and brand names and what quantities are being stored (use extra sheets if needed or attach a copy of Fire Bureau list).

S-Scientific/C-Common	Brand Name	Lbs or Gallons
a. OXYGEN	AIRCO	300 LBS
b. ARGON	AIRCO	300 LBS
c. KEROSENE	CHEVRON	50 GAL
d. OIL	UNION	375 GAL
e. PROPANE	FERRELL GAS	500 GAL

- B11. Do you have an accidental spill prevention program for the facility? ☐ Yes ☒ No Emergency response plan? ☐ Yes ☒ No  
If yes, attach plans.

- B12. Characteristics of Wastewater:

- a. Temperature \_\_\_\_\_ Don't know ☒  
b. pH level \_\_\_\_\_ Don't know ☒  
c. Flammable or explosive materials Yes ☐ No ☒ Don't know ☐  
d. Solid or viscous materials Yes ☐ No ☒ Don't know ☐  
e. Priority pollutants Yes ☐ No ☒ Don't know ☐ If yes, complete Attachment A.  
(See Attachment A for the priority pollutants list.)

- B13. Attach any wastewater analysis that has been performed on the wastewater discharge(s) from your facilities in the last year. Attach a copy of the most recent lab data to this questionnaire. Be sure to include the date of the analysis, name of laboratory performing the analysis, and location(s) from which sample(s) were taken (attach sketches, plans, etc., as necessary).

NONE

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Instructions for Completing page B3

- B9. List all chemicals regularly used in your facility. Indicate where they may most likely enter into the City's sewer system or storm system or both.
- B10. Indicate if the Fire Bureau has been notified of your onsite storage practices.
- B11. Answer yes or no. If yes, attach plans.
- B12. Indicate the characteristics of the wastewater. Priority pollutants are listed in Attachment A. If your facility's discharge may include any priority pollutants, Attachment A must be completed.
- B13. If any laboratory analyses have been performed on wastewater discharged from your facility, a copy of the results must be attached.

B 14. If your facility uses processes in any of the industrial categories or business activities listed below and any of these processes generate or cogenerate wastewater or waste sludge, place a check beside the category or business activity (check all that apply).

a. Industrial Categories

EPA

Category

Code

Category

- |           |                          |  |
|-----------|--------------------------|--|
| 467       | <input type="checkbox"/> | Aluminum forming   |
| 461       | <input type="checkbox"/> | Battery manufacturing                                      |
| 434       | <input type="checkbox"/> | Coal mining  |
| 465       | <input type="checkbox"/> | Coil coating   |
| 468       | <input type="checkbox"/> | Copper forming   |
| 469       | <input type="checkbox"/> | Electric & electronic components                           |
| 413       | <input type="checkbox"/> | Electroplating (If checked, please complete Attachment B)  |
| 415       | <input type="checkbox"/> | Inorganic chemicals  |
| 420       | <input type="checkbox"/> | Iron & steel   |
| 425       | <input type="checkbox"/> | Leather tanning & finishing                                |
| 433       | <input type="checkbox"/> | Metal Finishing (If checked, please complete Attachment B) |
| 464       | <input type="checkbox"/> | Metal molding & casting (Foundries)                        |
| 471       | <input type="checkbox"/> | Nonferrous metals forming                                  |
| 421       | <input type="checkbox"/> | Nonferrous metals manufacturing                            |
| 414 & 416 | <input type="checkbox"/> | Organic chemicals, plastics, & synthetic fibers            |
| 455       | <input type="checkbox"/> | Pesticides   |
| 419       | <input type="checkbox"/> | Petroleum refining   |
| 439       | <input type="checkbox"/> | Pharmaceuticals  |
| 463       | <input type="checkbox"/> | Plastics processing  |
| 466       | <input type="checkbox"/> | Porcelain enamel   |
| 430 & 431 | <input type="checkbox"/> | Pulp, paper, and fiberboard                                |
| 428       | <input type="checkbox"/> | Rubber   |
| 423       | <input type="checkbox"/> | Steam electric   |
| 410       | <input type="checkbox"/> | Textile mills  |
| 429       | <input type="checkbox"/> | Timber products (wood preserving)                          |

b. Other Business Activity

- |           |                          |                                  |
|-----------|--------------------------|----------------------------------|
|           | <input type="checkbox"/> | Adhesives                        |
|           | <input type="checkbox"/> | Analytical laboratories          |
|           | <input type="checkbox"/> | Auto laundries                   |
|           | <input type="checkbox"/> | Beverage bottler                 |
|           | <input type="checkbox"/> | Can making                       |
| 405       | <input type="checkbox"/> | Dairy products                   |
|           | <input type="checkbox"/> | Dry Cleaners                     |
| 457       | <input type="checkbox"/> | Explosives manufacturing         |
|           | <input type="checkbox"/> | Food/edible products processor   |
|           | <input type="checkbox"/> | Gas stations                     |
| 454       | <input type="checkbox"/> | Gum & wood chemicals             |
|           | <input type="checkbox"/> | Health services                  |
| 460       | <input type="checkbox"/> | Hospital                         |
|           | <input type="checkbox"/> | Laundries                        |
|           | <input type="checkbox"/> | Machine shops                    |
|           | <input type="checkbox"/> | Mechanical products              |
| 440       | <input type="checkbox"/> | Ore mining                       |
| 446 & 447 | <input type="checkbox"/> | Paint & ink                      |
| 459       | <input type="checkbox"/> | Photographic supplies            |
|           | <input type="checkbox"/> | Printing & publishing            |
|           | <input type="checkbox"/> | Radiator Shops                   |
|           | <input type="checkbox"/> | Slaughter/meat packing/rendering |
| 417       | <input type="checkbox"/> | Soaps & detergents               |
|           | <input type="checkbox"/> | Used oil reclaimers              |
|           | <input type="checkbox"/> | Waste recycler                   |
|           | <input type="checkbox"/> | Other _____                      |

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Instructions for Completing page B4

B14. A facility who checks off activities listed under A are covered by the Environmental Protection Agency's (EPA) categorical pretreatment standards and the City's local pretreatment standards. These facilities are termed "categorical users." Businesses that check-off activities listed under B are termed "noncategorical users" and are covered by the City's local pretreatment standards. If you have any questions regarding how to categorize your business activity, contact the City for technical guidance.

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B15. Attach a simple schematic drawing(s) of your facility, indicating: (Drawings should be 11 x 17, or smaller)

- a. Location and size of all service outlets, process drains, floor drains
- b. Existing sampling manholes or locations where samples may be collected
- c. Current or planned flow metering equipment
- d. Current or planned automatic sampling equipment
- e. Location of pretreatment processes, treated flows, and untreated flows
- f. Location and name of pertinent streets
- g. Flow schematic to indicate process and process discharge in gpd
- h. Chemical storage location
- i. Storm drain location, if known

B16. Pretreatment devices or processes used for treating wastewater or sludge (check as many as appropriate).

- ☐ Air flotation
- ☐ Carbon filtration
- ☐ Centrifuge
- ☐ Chemical precipitation
- ☐ Chlorination
- ☐ Cyclone
- ☐ Evaporation
- ☐ Filtration
- ☐ Filtration, Multi-media
- ☐ Filtration, Rotary
- ☐ Filtration, Sand
- ☐ Flow equalization
- ☐ Grease or oil separation, type \_\_\_\_\_
- ☐ Grease trap
- ☐ Grinding filter
- ☐ Grit removal
- ☐ Ion exchange
- ☐ Neutralization, pH correction
- ☐ Ozonation
- ☐ Reverse osmosis
- ☐ Screen
- ☐ Sedimentation
- ☐ Septic tank
- ☐ Solvent separation
- ☐ Spill protection
- ☐ Sump
- ☐ Biological treatment, type \_\_\_\_\_
- ☐ Rainwater diversion or storage \_\_\_\_\_
- ☐ Other chemical treatment, type \_\_\_\_\_
- ☐ Other physical treatment, type \_\_\_\_\_
- ☐ Other, type \_\_\_\_\_
- ☐ No pretreatment provided

B17. Is additional pretreatment required? ☐ Yes ☒ No ☐ Don't know If yes, describe necessary pretreatment.

B18. Is industry in compliance with City industrial pretreatment ordinance? ☐ Yes ☐ No ☒ Don't Know  
See ordinance.

B19. Is industry in compliance with Federal Categorical standards? ☐ Yes ☐ No ☒ Don't Know

B20. Are any process changes or expansions planned during the next three years? ☐ Yes ☒ No  
If yes, attach a separate sheet to this form describing the nature of planned changes or expansions.

B21. Please describe any previous spill events and remedial measures taken to prevent their reoccurrence:

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Instructions for Completing page B5

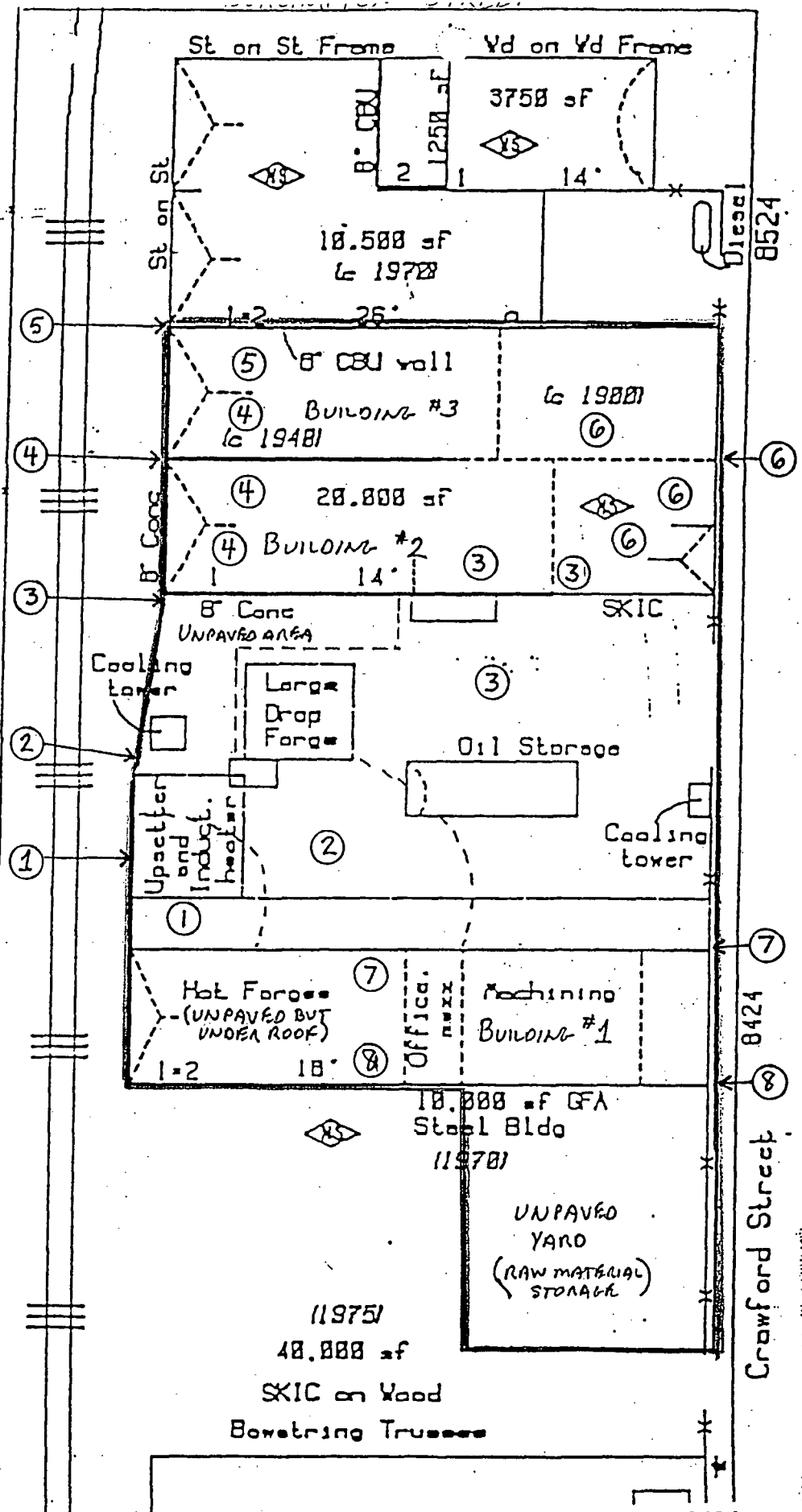
B15. Attach a simple schematic drawing(s). Approved building plans may be substituted.

Example:

COLUMBIA FORGE AND  
MACHINE WORKS  
8424 N. CRAWFORD ST.  
PORTLAND, OR 97203

1. FACILITY BOUNDARY IN  
REQ.
2. ① DENOTES STORM  
DISCHARGE OUTFALLS
3. ① DENOTES DRAINAGE  
AREAS (ROOF + SURFACE)
4. OUTFALLS 4, 5, 7 + 8  
CONNECT TO CITY;  
BALANCE DRAIN TO THE  
SURFACE.
5. ONLY THE UNPAVED  
RAW MATERIAL STORAGE  
YARD AND THE AREA  
BETWEEN BUILDINGS  
#1 AND #2 ARE  
UNCOVERED.

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B22. Comments: \_\_\_\_\_

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I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature\*

*Vince Schiele*

Title

*Gen. Mgr.*

Date

*8-6-92*

\*This form should be signed by a responsible corporate officer, a general partner, or by a duly authorized representative. See 40 CFR 403.12(l) for full definition.

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Instructions for Completing page B6

B22. Place comments here.

Certification requirements are contained in 40 CFR 403.12(l). This form must be signed by a responsible corporate officer, a general partner, or d. authorized representative.

Return the completed form to:

Industrial Waste Division  
City of Portland  
Bureau of Environmental Services  
1120 S.W. Fifth Avenue  
Portland, Oregon 97204-1972

Complete Attachments A and B as required.

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Attachment A  
PRIORITY POLLUTANT INFORMATION

SOURCE CONTROL MANAGEMENT

1. Please indicate by placing an "X" in the appropriate space by each listed chemical whether it is Suspected to be Absent, Known to be Absent, Suspected to be Present, or Known to be Present in your manufacturing or service activity or generated as a byproduct. Some compounds are known by other names. Please refer to the Priority Pollutant Synonym Listing for those compounds which have an asterisk (\*).

Item No.	CASRN	Chemical Compound	Suspected Absent	Known Absent	Suspected Present	Known Present
1	7664417	ammonia		X		
2	1332214	asbestos (fibrous)		X		
3	57125	cyanide (total)		X		
4	7440360	antimony (total)		X		
5	7440382	arsenic (total)		X		
6	7440417	beryllium (total)		X		
7	7440439	cadmium (total)		X		
8	7440473	chromium (total)		X		
9	7440508	copper (total)		X		
10	7439921	lead (total)		X		
11	7439976	mercury (total)		X		
12	7440020	nickel (total)		X		
13	7782492	selenium (total)		X		
14	7440224	silver (total)		X		
15	7440280	thallium (total)		X		
16	7440666	zinc (total)		X		
17	83329	acenaphthene		X		
18	208968	acenaphthylene		X		
19	107028	acrolein		X		
20	107131	acrylonitrile		X		
21	309002	aldrin		X		
22	120127	anthracene		X		
23	71432	benzene		X		
24	92875	benzidine		X		
25	56553	benzo(a)anthracene*		X		
26	50328	benzo(a)pyrene*		X		
27	205992	benzo(b)fluoranthene		X		
28	191242	benzo(g,h,i)perylene*		X		
29	207089	benzo(k)fluoranthene*		X		
30	319846	a-BHC(alpha)		X		
31	319857	b-BHC(beta)		X		
32	319868	d-BHC(delta)		X		
33	58899	g-BHC(gamma)		X		
34	111444	bis(2-chloroethyl)ether*		X		
35	111911	bis(2-chloroethoxy)methane*		X		
36	108601	bis(2-chloroisopropyl)ether*		X		
37	542881	bis(chloromethyl)ether*		X		

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## Attachment A (Continued)

Item No.	CASRN	Chemical Compound	Suspected Absent	Known Absent	Suspected Present	Known Present
38	117817	bis(2-ethylhexyl)phthalate*				
39	75274	bromodichloromethane*		X		
40	75252	bromoform*		X		
41	74839	bromomethane*		X		
42	101553	4-bromophenylphenyl ether		X		
43	85687	butylbenzyl phthalate		X		
44	56235	carbon tetrachloride*		X		
45	57749	chlordanes		X		
46		4-chloro-3-methylphenol*		X		
47	108907	chlorobenzene		X		
48	75003	chloroethane*		X		
49	110758	2-chloroethylvinyl ether		X		
50	67663	chloroform*		X		
51	74813	chloromethane*		X		
52	91587	2-chloronaphthalene		X		
53	95578	2-chlorophenol*		X		
54	7005723	4-chlorophenylphenyl ether		X		
55	218019	chrysene*		X		
56	72548	4,4'-DDD*		X		
57	72559	4,4'-DDE*		X		
58	50293	4,4'-DDT*		X		
59	53703	dibenzo(a,h)anthracene*		X		
60	124481	dibromochloromethane*		X		
61	95501	1,2-dichlorobenzene*		X		
62	541731	1,3-dichlorobenzene*		X		
63	106467	1,4-dichlorobenzene*		X		
64	91941	3,3-dichlorobenzidine		X		
65	75718	dichlorodifluoromethane*		X		
66	75343	1,1-dichloroethane*		X		
67	107062	1,2-dichloroethane*		X		
68	75354	1,1-dichloroethene*		X		
69	111444	trans-1,2-dichloroethene*		X		
70	120832	2,4-dichlorophenol		X		
71	78875	1,2-dichloropropane*		X		
72	542756	(cis & trans)1,3-dichloropropene*		X		
73	60571	dieldrin		X		
74	84662	diethyl phthalate*		X		
75	105679	2,4-dimethylphenol*		X		
76	131113	dimethyl phthalate		X		
77		di-n-butyl phthalate		X		
78		di-n-octyl phthalate*		X		

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Attachment A (Continued)

SOURCE CONTROL MANAGEMENT  
Suspected Present Known Present

Item No.	CASRN	Chemical Compound	Suspected Absent	Known Absent	Suspected Present	Known Present
79		1,6-dinitro-2-methylphenol*		X		
80	51285	2,4-dinitrophenol		X		
81	121142	2,4-dinitrotoluene		X		
82	606202	2,6-dinitrotoluene		X		
83	122667	1,2-diphenylhydrazine*		X		
84	959988	endosulfan I*		X		
85	33213659	endosulfan II*		X		
86	1031078	endosulfan sulfate		X		
87	72208	endrin		X		
88	7421934	endrin aldehyde		X		
89	100414	ethylbenzene		X		
90	206440	fluoranthene		X		
91	86737	fluorene*		X		
92	76448	heptachlor		X		
93	1024573	heptachlor epoxide		X		
94	118741	hexachlorobenzene*		X		
95	87683	hexachlorobutadiene		X		
96	77474	hexachlorocyclopentadiene*		X		
97	67721	hexachloroethane*		X		
98	193395	indeno (1,2,3-cd)pyrene*		X		
99	78591	isophorone*		X		
100	74873	methylene chloride*		X		
101	91203	naphthalene		X		
102	98953	nitrobenzene		X		
103	88755	2-nitrophenol*		X		
104	100027	4-nitrophenol*		X		
105	62759	n-nitrosodimethylamine*		X		
106	621647	n-nitrosodipropylamine*		X		
107	86306	n-nitrosodiphenylamine*		X		
108	12674112	PCB-1016*		X		
109	11104282	PCB-1221*		X		
110	11141165	PCB-1232*		X		
111	53469219	PCB-1242*		X		
112	12672296	PCB-1248*		X		
113	11097691	PCB-1254*		X		
114	11096825	PCB-1260*		X		
115	87865	pentachlorophenol		X		
116	85018	phenanthrene		X		
117	108952	phenol		X		
118	129000	pyrene		X		
119	1746016	2,3,7,8-tetrachlorodibenzo-p-dioxin*		X		

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## Attachment A (Continued)

Item No.	CASRN	Chemical Compound	Suspected Absent	Known Absent	Suspected Present	Known Present
120	630206	1,1,2,2-tetrachloroethane*		X		
121	127184	tetrachloroethene*		X		
122	108883	toluene*		X		
123	8001352	toxaphene		X		
124	120821	1,2,4-trichlorobenzene		X		
125	71556	1,1,1-trichloroethane*		X		
126	79005	1,1,2-trichloroethane*		X		
127	79016	trichloroethene*		X		
128	75694	trichlorofluoromethane*		X		
129	88062	2,4,6-trichlorophenol		X		
130	75014	vinyl chloride*		X		

2. For chemical compounds listed above that are indicated to be "Known Present," please list and provide the following data for each: (attach additional sheets if needed)

Item No.	Chemical Compound	Estimated Annual Usage (lb)	Loss or discharge to Sewers (lb/yr)
			Sanitary Storm



CITY OF  
**PORTLAND, OREGON**  
BUREAU OF ENVIRONMENTAL SERVICES

Environmental Survey  
Wastewater Generating Characteristics

SOURCE CONTROL MANAGEMENT PLAN City Use Only

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Date Received: \_\_\_\_\_  
Treatment Plant: \_\_\_\_\_  
Service Area: \_\_\_\_\_  
Pump Stations: \_\_\_\_\_  
Sewer Node: \_\_\_\_\_

Please complete in full, either typed or printed clearly.

SECTION A - GENERAL INFORMATION

A1. Company name: LAMPROS STEEL, INC.

A2. Division name: \_\_\_\_\_

A3. Address of the facility: 8524 N. CRAWFORD ST.  
PORTLAND, OR 97203

A4. Mailing address: Same

A5. Representative completing this form:  
Name BRIAN TAMBLYN  
Title CONTROLLER Telephone 285-6667 FAX 289-7337

A6. Brief description of business—principal products and services:  
WHOLESALE STEEL SALES

A7. Is the building presently connected to public sewer system? ☒ Yes ☐ No  
If no, have you applied for a sewer connection? ☐ Yes ☐ No  
Estimated date of connection \_\_\_\_\_

A8. Standard Industrial Classification Number(s) (SIC Code if known). \_\_\_\_\_

A9. Do you or will you discharge oils, grease, or fats to the public sewer? ☐ Yes ☒ No

A10. Place a check for device used: N/A  
a. Oil and water separator ☐ Yes ☐ No  
b. Grease trap ☐ Yes ☐ No  
c. Sand/sediment trap ☐ Yes ☐ No

A11. What is your normal frequency of cleaning the oil and grease trap? Where do you dispose of trapped oil and grease? \_\_\_\_\_

A12. Do you or will you have chemical storage containers, bins, or ponds at your facility? 500 gal. above ground diesel fuel tank ☒ Yes ☐ No  
Do you have any underground storage tank(s) ☐ Yes ☒ No

A13. Have you been issued a local, state, or federal environmental permit? UNKNOWN ☐ Yes ☐ No  
If yes, please list the types of permit(s). whatever required at time of installation; Fire Marshall has inspected

A14. Do you or will you have floor drains in your manufacturing or storage area? ☐ Yes ☒ No  
If you have chemical storage containers, bins, or ponds, or floor drains in manufacturing or storage area, could an accidental spill lead to a discharge to an onsite disposal system (e.g., through a floor drain)? ☐ Yes ☒ No  
Public sewer? ☐ Yes ☒ No  
To storm drain? ☐ Yes ☒ No  
To ground? ☐ Yes ☒ No

A15. Do you or will you discharge wastewater (other than domestic waste from bathrooms, toilets, etc.) to an onsite disposal system? ☐ Yes ☒ No  
or storm sewer? ☐ Yes ☒ No

A16. Do you or will you discharge wastewater (other than domestic waste from bathrooms, toilets, etc.) to the public sewer system? ☐ Yes ☒ No

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: Brian W. Tamblyn Title CONTROLLER Date 8/5/92

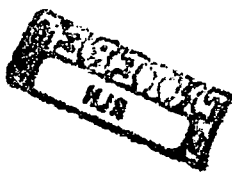
## Environmental Survey Instructions

Instructions for Completing page A1

### Section A—General Information

- A1. Enter the name or title of your business.
- A2. Enter the Division Name, if applicable.
- A3. Enter the address of the facility discharging to the City's sewer system.
- A4. Enter mailing address if different than A3.
- A5. Give the name of the person who is thoroughly familiar with the facts reported on this form and who can be contacted by the City staff.
- A6. Give a brief description of the facility. Include products or services.
- A8. Include all numbers that apply to business. Leave blank if not known.
- A13. Types of environmental permits to list include but are not limited to air, hazardous waste, NPDES for discharges to surface waters.
- A16. Process wastewater could be discharged via a direct connection to the City's collection system, or through floor drains.

\*This form should be signed by a responsible corporate officer, a general partner, or by a duly authorized representative. See 40 CFR 403.13(i) for full definition.



Instructions for Completing page B1

B2. Provide the daily average and peak flows of waste generated in gallons per day for the last 12 months. The average flows can be calculated by dividing the total flows (of last 12 months) by the number of days that a discharge of water occurred (or operating day).

- For estimating sanitary flows, use 35 gallons per each employee.

Include the day(s) of the week and duration (length of time) of discharge to the sewer system. Include day(s) of the week and approximate time for normal cleanup activities.

B3. List the types of products, giving the common or brand name. Enter from your records the amounts produced daily for the previous calendar year and the process used.

B4. Provide the water source(s) from which you get your water if there is more than one source, list each source. Provide the water account number. If the source is City water. To convert quantities from your water bill in CCF to gallons per day (gal/day), multiply CCF by 748.

B5. Estimate wastewater discharge quantities.

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SOURCE CONTROL MANAGEMENT



# Environmental Survey

## SECTION B - DETAILED WASTEWATER INFORMATION

Company Name  
Facility Address

LAMPROS STEEL, INC.  
8524 N. CRAWFORD PORTLAND OR 97203

B1. Please describe processes to be used in your facility that will result or may result in wastewater discharge to the public sewer system.

NONE

B2. This facility generates or will generate the following types of wastes (check all that apply):

	Average gallons per day	Peak gallons per day
<input checked="" type="checkbox"/> Domestic wastes (restrooms, employee showers, etc., Estimate 35 gallons per day for each employee)	<u>420</u>	
<input type="checkbox"/> Cooling water, noncontact		
<input type="checkbox"/> Boiler/Tower blowdown		
<input type="checkbox"/> Cooling water, contact		
<input type="checkbox"/> Process		
<input type="checkbox"/> Equipment/Facility Washdown		
<input type="checkbox"/> Air Pollution Control Unit		
<input checked="" type="checkbox"/> Stormwater runoff to sewer		
<input type="checkbox"/> Other (describe)		
<input type="checkbox"/> Cleanup		
Total	<u>420</u>	

into Willamette  
river; we are  
located along  
the east  
bank of the river, just south of the St. Johns bridge.

Time and Duration of Discharge:

Cleanup Time:

The runoff from our steel yard just flows down  
the bank and into the river.

B3. Products Produced: (Attach additional sheets as necessary)

Type	Amount and Rate of Production	Process
<u>No products produced</u>		

B4. Water supplied from: (Best estimate if not metered)  
(City, Well, etc.)

Water Source(s)	Water Acct No.	Water Quantities*
		Estimated Meter
a. <u>City</u>	<u>*</u>	<u>420</u> gal/day
b. _____	_____	_____ gal/day
c. _____	_____	_____ gal/day

\*1 ccf = 748 gallons

\* billing is to owners of  
the property

Total

B5. Wastes are discharged or may be discharged to: (check all that apply)

	Average gallons per day	Peak gallons per day
<input checked="" type="checkbox"/> Sanitary sewer	<u>420</u>	
<input type="checkbox"/> Storm sewer		
<input type="checkbox"/> Surface water		
<input type="checkbox"/> Groundwater (onsite disposal)		
<input type="checkbox"/> Waste haulers		
<input type="checkbox"/> Other (describe)		
Total	<u>420</u>	

Are the discharges batch ☐? continuous ☒?

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B6. Are any liquid wastes or sludges from this firm disposed of by means other than discharge to the sewer system?  
☐ Yes ☒ No If "no," skip Items B7 and B8; If "yes," complete items B7 and B8.

B7. These wastes may best be described as:

N/A

Item No.

Estimated gallons or pounds  
per year

- ☐ Acids
- ☐ Alkalies
- ☐ Heavy metal sludges
- ☐ Inks/dyes
- ☐ Oil and/or grease
- ☐ Organic compounds
- ☐ Paints
- ☐ Pesticides
- ☐ Plating wastes
- ☐ Pretreatment sludges
- ☐ Solvents/thinners
- ☐ Other hazardous wastes (specify)


☐ Other wastes (specify)

N/A

B8. For the above checked wastes, does your company practice:

- ☐ Onsite storage location
- ☐ Offsite storage
  - hauler's name
  - address
  - hauler's DEQ permit #
  - phone number
- ☐ Onsite disposal
- ☐ Offsite disposal
  - hauler's name
  - address
  - hauler's DEQ permit #
  - phone number

Describe the method(s) of storage or disposal checked above.


Do you have an EPA or DEQ permit for storage or hauling? ☐ Yes ☐ No If yes, attach a copy of the permit.

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Instructions for Completing page B2

B6. Answer yes or no.

B7. If the answer to B6 is yes, describe the types of wastes.

B8. If the answer to B6 is no, describe your storage and disposal practices for these wastes. An onsite disposal system could be a septic system, lagoon, holding ponds (evaporative-type).

- A batch discharge is one which results from the draining of storage tanks or process tanks; intermittent boiler blowdown, etc.

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- B9. List all principal materials regularly used in your facility that may be present in your wastewater discharge (such as cleaning agents, solvents, processing waste, plating solutions, catalysts, milk wastes, ink, etc.). Identify chemical constituents, if known, or brand name. Attach material safety data sheets.

SOURCE CONTROL MANAGEMENT

Generic Type	Amount Per Year	Discharged to		Spill Potential		Chemical Constituents or Brand Name
		Storm	Sanitary	Storm	Sanitary	
a. Example: Degreaser	3 gallons			X		Trichloroethylene
b. DIESEL FUEL	5000 gal					500 gal above ground tank; spill potential to ground.
c.						
d.						
e.						
f.						
g.						
h.						
i.						
j.						
k.						

(Attach additional sheets if necessary)

- B10. Have you listed with the Fire Bureau the onsite storage of flammable or combustible liquids or solids, hazardous chemicals, or radioactive materials?

☒ Yes ☐ No FIRE DEPT INSPECTED FACILITY IN SPRING, 1992.

If yes, list materials, if any, and their scientific or common and brand names and what quantities are being stored (use extra sheets if needed or attach a copy of Fire Bureau list).

S-Scientific/C-Common	Brand Name	Lbs or Gallons
a. DIESEL FUEL	—	500 gal
b.		
c.		
d.		

- B11. Do you have an accidental spill prevention program for the facility? ☐ Yes ☒ No Emergency response plan? ☐ Yes ☒ No  
If yes, attach plans.

- B12. Characteristics of Wastewater: N/A

- a. Temperature \_\_\_\_\_ Don't know ☐  
b. pH level \_\_\_\_\_ Don't know ☐  
c. Flammable or explosive materials Yes ☐ No ☐ Don't know ☐  
d. Solid or viscous materials Yes ☐ No ☐ Don't know ☐  
e. Priority pollutants Yes ☐ No ☐ Don't know ☐ If yes, complete Attachment A.  
(See Attachment A for the priority pollutants list.)

- B13. Attach any wastewater analysis that has been performed on the wastewater discharge(s) from your facilities in the last year. Attach a copy of the most recent lab data to this questionnaire. Be sure to include the date of the analysis, name of laboratory performing the analysis, and location(s) from which sample(s) were taken (attach sketches, plans, etc., as necessary).

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Instructions for Completing page B3

- B9. List all chemicals regularly used in your facility. Indicate where they may most likely enter into the City's sewer system or storm system or both.
- B10. Indicate if the Fire Bureau has been notified of your onsite storage practices.
- B11. Answer yes or no. If yes, attach plans.
- B12. Indicate the characteristics of the wastewater. Priority pollutants are listed in Attachment A. If your facility's discharge may include any priority pollutants, Attachment A must be completed.
- B13. If any laboratory analyses have been performed on wastewater discharged from your facility, a copy of the results must be attached.

B14. If your facility uses processes in any of the industrial categories or business activities listed below and any of these processes generate or cogenerate wastewater or waste sludge, place a check beside the category or business activity (check all that apply).

a. Industrial Categories

EPA

Category

Code

Category

- N/A
- 467 ☐ Aluminum forming
  - 461 ☐ Battery manufacturing
  - 434 ☐ Coal mining
  - 465 ☐ Coil coating
  - 468 ☐ Copper forming
  - 469 ☐ Electric & electronic components
  - 413 ☐ Electroplating (If checked, please complete Attachment B)
  - 415 ☐ Inorganic chemicals
  - 420 ☐ Iron & steel
  - 425 ☐ Leather tanning & finishing
  - 433 ☐ Metal Finishing (If checked, please complete Attachment B)
  - 464 ☐ Metal molding & casting (Foundries)
  - 471 ☐ Nonferrous metals forming
  - 421 ☐ Nonferrous metals manufacturing
  - 414 & 416 ☐ Organic chemicals, plastics, & synthetic fibers
  - 455 ☐ Pesticides
  - 419 ☐ Petroleum refining
  - 439 ☐ Pharmaceuticals
  - 463 ☐ Plastics processing
  - 466 ☐ Porcelain enamel
  - 430 & 431 ☐ Pulp, paper, and fiberboard
  - 428 ☐ Rubber
  - 423 ☐ Steam electric
  - 410 ☐ Textile mills
  - 429 ☐ Timber products (wood preserving)

b. Other Business Activity

- N/A
- ☐ Adhesives
  - ☐ Analytical laboratories
  - ☐ Auto laundries
  - ☐ Beverage bottler
  - ☐ Can making
  - 405 ☐ Dairy products
  - ☐ Dry Cleaners
  - 457 ☐ Explosives manufacturing
  - ☐ Food/edible products processor
  - ☐ Gas stations
  - 454 ☐ Gum & wood chemicals
  - ☐ Health services
  - 460 ☐ Hospital
  - ☐ Laundries
  - ☐ Machine shops
  - ☐ Mechanical products
  - 440 ☐ Ore mining
  - 446 & 447 ☐ Paint & ink
  - 459 ☐ Photographic supplies
  - ☐ Printing & publishing
  - ☐ Radiator Shops
  - ☐ Slaughter/meat packing/rendering
  - 417 ☐ Soaps & detergents
  - ☐ Used oil reclaimers
  - ☐ Waste recycler
  - ☐ Other \_\_\_\_\_

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Instructions for Completing page B4

B14. A facility who checks off activities listed under A are covered by the Environmental Protection Agency's (EPA) categorical pretreatment standards and the City's local pretreatment standards. These facilities are termed "categorical users." Businesses that check-off activities listed under B are termed "noncategorical users" and are covered by the City's local pretreatment standards. If you have any questions regarding how to categorize your business activity, contact the City for technical guidance.

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B15. Attach a simple schematic drawing(s) of your facility, indicating: (Drawings should be 11 x 17, or smaller)

- a. Location and size of all service outlets, process drains, floor drains
- b. Existing sampling manholes or locations where samples may be collected
- c. Current or planned flow metering equipment
- d. Current or planned automatic sampling equipment
- e. Location of pretreatment processes, treated flows, and untreated flows
- f. Location and name of pertinent streets
- g. Flow schematic to indicate process and process discharge in gpd
- h. Chemical storage location
- i. Storm drain location, if known

N/A

B16. Pretreatment devices or processes used for treating wastewater or sludge (check as many as appropriate).

- ☐ Air flotation
- ☐ Carbon filtration
- ☐ Centrifuge
- ☐ Chemical precipitation
- ☐ Chlorination
- ☐ Cyclone
- ☐ Evaporation
- ☐ Filtration
- ☐ Filtration, Multi-media
- ☐ Filtration, Rotary
- ☐ Filtration, Sand
- ☐ Flow equalization
- ☐ Grease or oil separation, type \_\_\_\_\_
- ☐ Grease trap
- ☐ Grinding filter
- ☐ Grit removal
- ☐ Ion exchange
- ☐ Neutralization, pH correction
- ☐ Ozonation
- ☐ Reverse osmosis
- ☐ Screen
- ☐ Sedimentation
- ☐ Septic tank
- ☐ Solvent separation
- ☐ Spill protection
- ☐ Sump
- ☐ Biological treatment, type \_\_\_\_\_
- ☐ Rainwater diversion or storage \_\_\_\_\_
- ☐ Other chemical treatment, type \_\_\_\_\_
- ☐ Other physical treatment, type \_\_\_\_\_
- ☐ Other, type \_\_\_\_\_
- ☐ No pretreatment provided

N/A

B17. Is additional pretreatment required? ☐ Yes ☐ No ☐ Don't know If yes, describe necessary pretreatment.

N/A

B18. Is industry in compliance with City industrial pretreatment ordinance? ☐ Yes ☐ No ☐ Don't Know  
See ordinance.

N/A

B19. Is industry in compliance with Federal Categorical standards? ☐ Yes ☐ No ☐ Don't Know

N/A

B20. Are any process changes or expansions planned during the next three years? ☐ Yes ☐ No  
If yes, attach a separate sheet to this form describing the nature of planned changes or expansions.

N/A

B21. Please describe any previous spill events and remedial measures taken to prevent their reoccurrence:

NONE

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Instructions for Completing page B5

B15. Attach a simple schematic drawing(s). Approved building plans may be substituted.

Example:

B22. Comments:

none

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SOURCE CONTROL MANAGEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:

Brian W. Vandyke

Title

CONTROLLER

Date

8/5/92

\*This form should be signed by a responsible corporate officer, a general partner, or by a duly authorized representative. See 40 CFR 403.12(l) for full definition.

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Instructions for Completing page B6

B22. Place comments here.

Certification requirements are contained in 40 CFR 403.12(l). This form must be signed by a responsible corporate officer, a general partner, or d. authorized representative.

Return the completed form to:

Industrial Waste Division  
City of Portland  
Bureau of Environmental Services  
1120 S.W. Fifth Avenue  
Portland, Oregon 97204-1972

Complete Attachments A and B as required.



# CITY OF PORTLAND ENVIRONMENTAL SERVICES



1120 SW Fifth Avenue, Room 1000, Portland, Oregon 97204-1912 • Sam Adams, Commissioner • Dean Marriott, Director

October 13, 2006

Mr. Tom Gainer  
Department of Environmental Quality  
2020 SW 4<sup>th</sup> Avenue, Suite 400  
Portland, OR 97201-4987

Subject: Preliminary Source Control Evaluation Sampling and Analysis Plan, Crawford Street Site, Portland, Oregon

Dear Mr. Gainer:

The City of Portland Bureau of Environmental Services (BES) has reviewed the Preliminary Source Control Evaluation Sampling and Analysis Plan, dated September 21, 2006, prepared by the Bridgewater Group, Inc. for the Crawford Street Corporation (CSC). This review was intended to assess whether the plan will provide an adequate evaluation of potential contaminant discharges to adjacent City stormwater collection systems (City Outfall Basins 50 and 52).

Research conducted during the development of our Water Pollution Control Laboratory (WPCL) Preliminary Assessment (GSI, 2006), included an evaluation of the potential historic and/or current discharges from the adjacent CSC site at 8424 N. Crawford Street. Specific comments and supplementary information are detailed below for DEQ consideration.

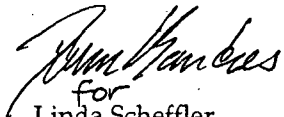
## Site Stormwater Runoff Features

1. The plan does not define or display all stormwater drainage areas from the site. The "Site Storm Water Runoff Features" section and Figure 2 should be revised to reflect all piped and overland drainages, basins, and flow directions. Adjacent properties and operational areas identified in the plan also should be labeled on the figure, as well as existing outfalls believed to be inactive. Available plumbing records and drainage diagrams for this area are attached (Attachments 1 and 2). Section 3.3.3 of the WPCL Preliminary Assessment describes the City's understanding of the CSC site stormwater drainage, which includes overland discharges to the WPCL property.
2. Piped discharges include roof drains connected to storm lines in City Outfall Basin 52 (on N. Crawford Street and N. Burlington Street) as well as roof drains discharging to the rail corridor. Roof surfaces at industrial sites have the potential to accumulate site contaminants and convey contaminants off site via stormwater runoff.
3. The site description identifies a west/east active railroad corridor owned by the City of Portland. The City of Portland granted the Oregon-Washington Railroad &

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Mr. Tom Gainer  
October 13, 2006

Sincerely,

A handwritten signature in cursive script, appearing to read "Linda Scheffler".

for  
Linda Scheffler  
Water Resources Program Manager  
Superfund Program

Attachments: Attachment 1 - Plumbing Records  
Attachment 2 - Columbia Forge Drainage Diagrams  
Attachment 3 - Photo from WPCL  
Attachment 4 - WPCL Drainage Diagram

cc: Tom Roick/DEQ  
Kristine Koch/EPA  
Dawn Sanders/ City of Portland  
Rick Applegate/City of Portland  
Michael Pronold/City of Portland  
Bruce Brody-Heine/GSI

## **Attachment 1**

Form 3-77 (1921-47)

CITY OF PORTLAND, OREGON  
DEPARTMENT OF PUBLIC WORKS  
BUREAU OF MAINTENANCE  
SEWER BRANCH

Plot No. 52445

Date 2/24/48

Location 8630 N. Burlington

Between At Crawford St.

Addition St. Johns

Lot 3, 4, 5, 6 Blk 5

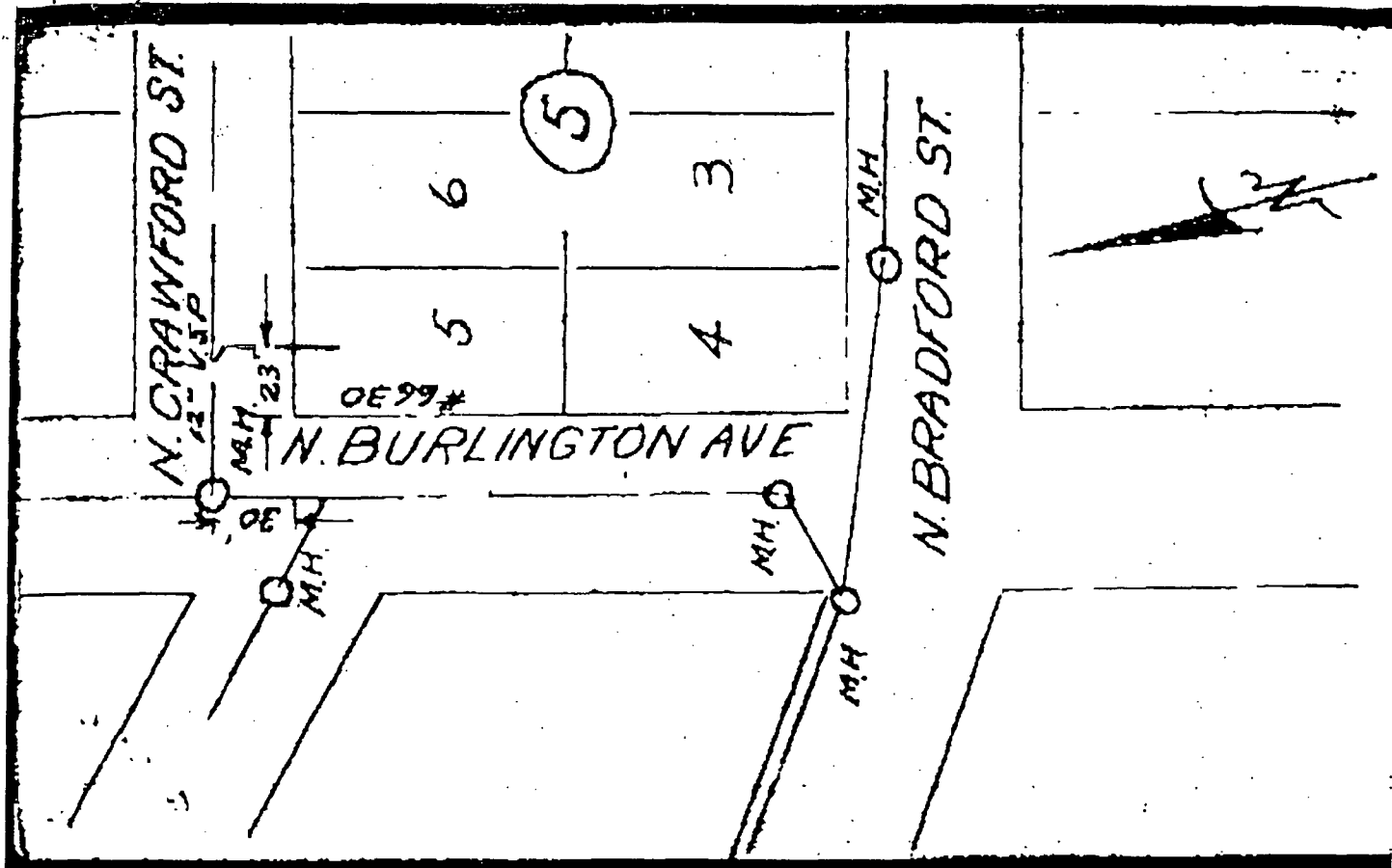
Applicant Rowland Plbg Co.

Remarks Br. con. Y in trunk Meas. OK 6" pipe.

Inspected 2/24/47 19 By A. Hanson

Book 6 Page 491 New ☒ Repair

Other House on Branch



2121 S.E.

FORM W 27-1  
7-19-60

CITY OF PORTLAND, OREGON  
DEPARTMENT OF PUBLIC WORKS  
BUREAU OF MAINTENANCE  
SEWER BRANCH

See also 79658

Pmt. No. 79658

Date July 26, 19 63

Location 6630 N. Burlington Ave.

Between

Addition St. Johns Add.

Lot 3, 4, 5 & 6 Blk. 5

Applicant Donohue & Fleskes

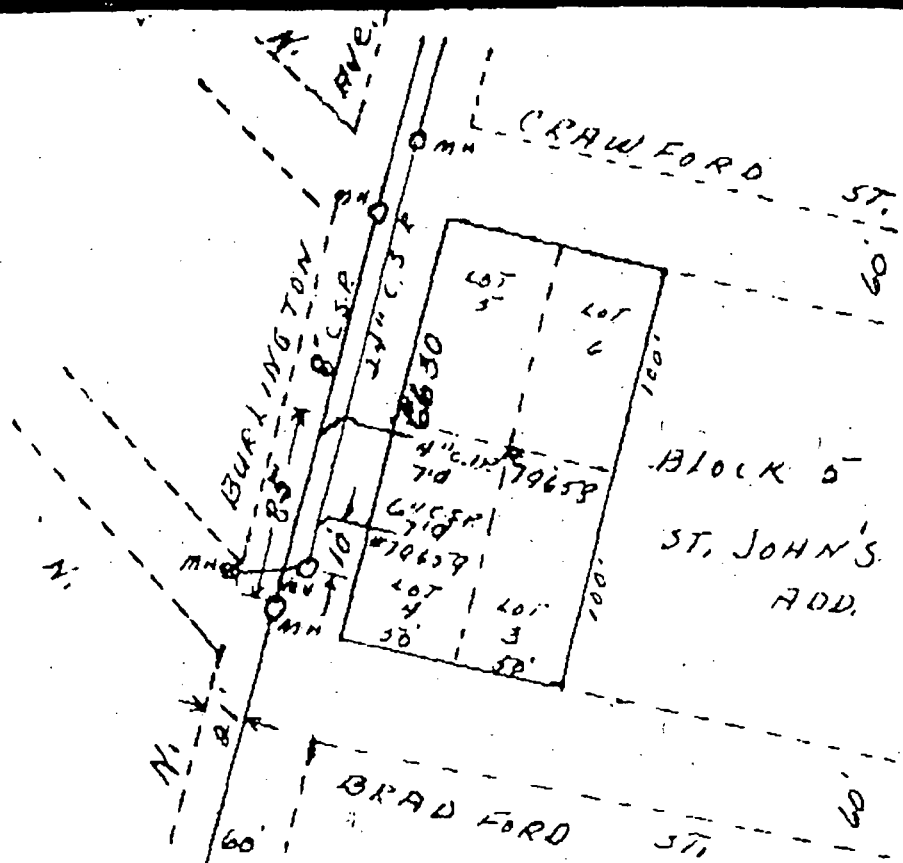
Remarks 4" C.I.P. to Br. at

curb. 85' north of manhole near N. line of N. Bradford St.

7' deep at curb.

Inspected 7-30-63 19 By Grossi

Hour 6 Page 421 New Repair



1/4 2121

CITY OF PORTLAND, OREGON  
DEPARTMENT OF PUBLIC WORKS  
BUREAU OF MAINTENANCE  
SEWER BRANCH

Pmt No 61206

Date 1/18 19 51

Location 8504 N. Crawford

Between N. Leavitt & N. Burlington

Addition James Johns 2nd

Lot 1-8

Blk. 5

Applicant Emmert, J. H.

Remarks Br. Con. Trunk 6" pipe, Meas. 125' so. of  
so. 1. of Burlington

Inspected 2/23

19 51

By Walton

Book 6

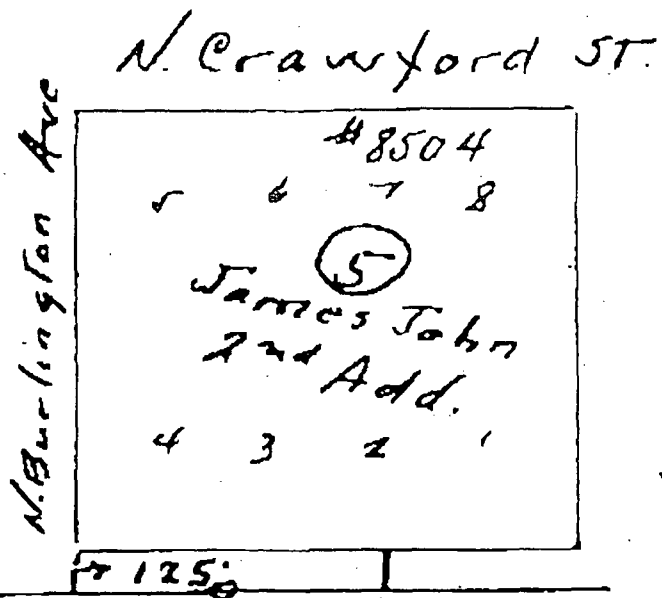
Page 490

New ☒

Repair

Other House on Branch





0076463  
COP/EPA 104(e)

21215E

FORM W 271-1  
(4-69)CITY OF PORTLAND, OREGON  
DEPARTMENT OF PUBLIC WORKS  
BUREAU OF DESIGN  
SEWER BRANCH91294  
Pmt. No. 91293  
Date 2-3-72

Location 8424 N. Crawford St.

Between

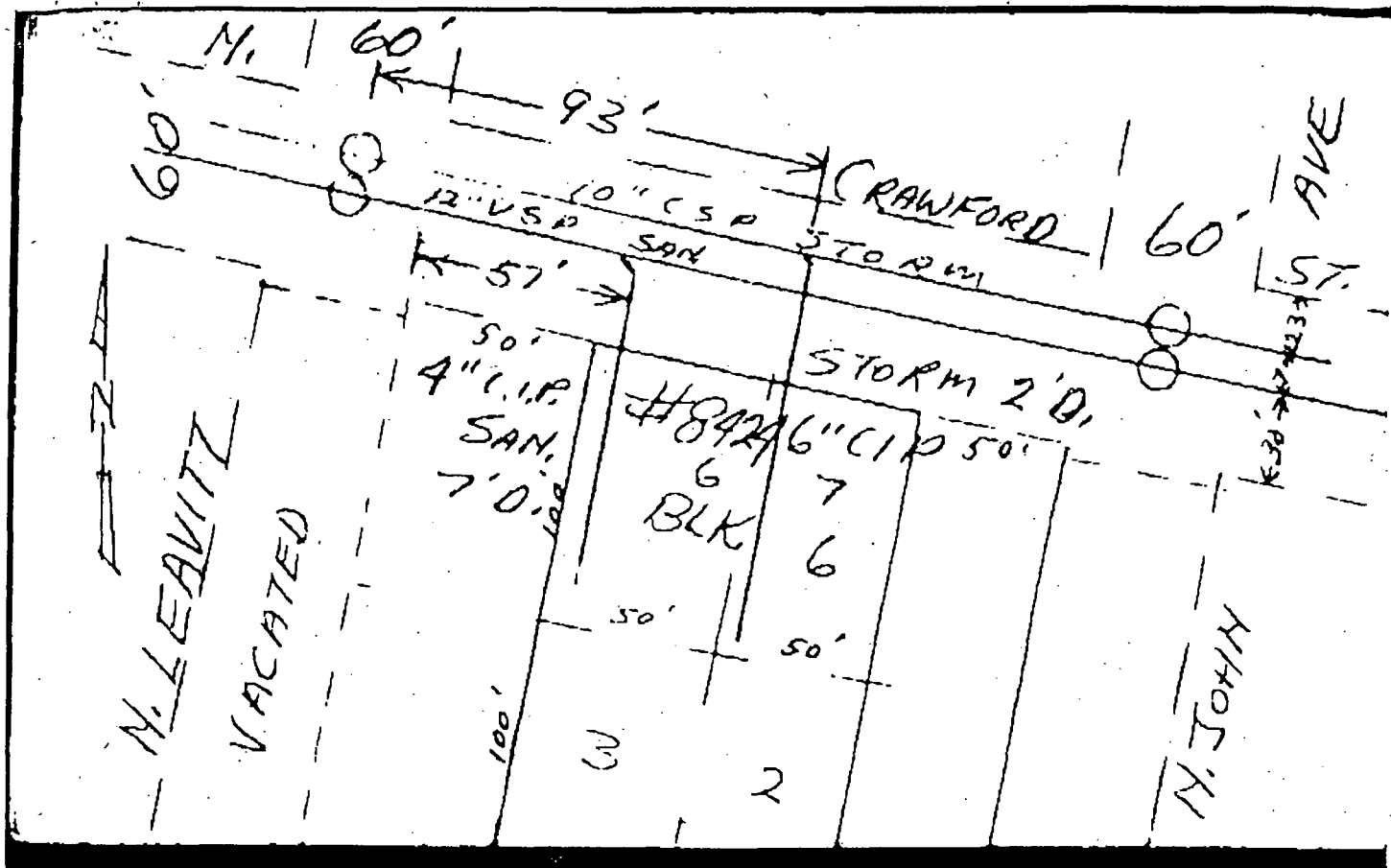
Addition Town of St. Johns Lot 2,3,6,7 Blk 6

Applicant Rowland Plbg & Htg Waiver No ☐ Yes ☐ #Remarks 4" CIP san to existing Y in MS 7 ft deep at curb  
57 ft E of E.L. of Vac. Leavitt St. **SANITARY ONLY SEWER**6" CIP to Maint installed Y in MS 93' E of Manhole in  
N Leavitt Ave. 2 ft deep at curb **STORM ONLY SEWER**

91294

Inspected 2-4-72 19 By Brooks

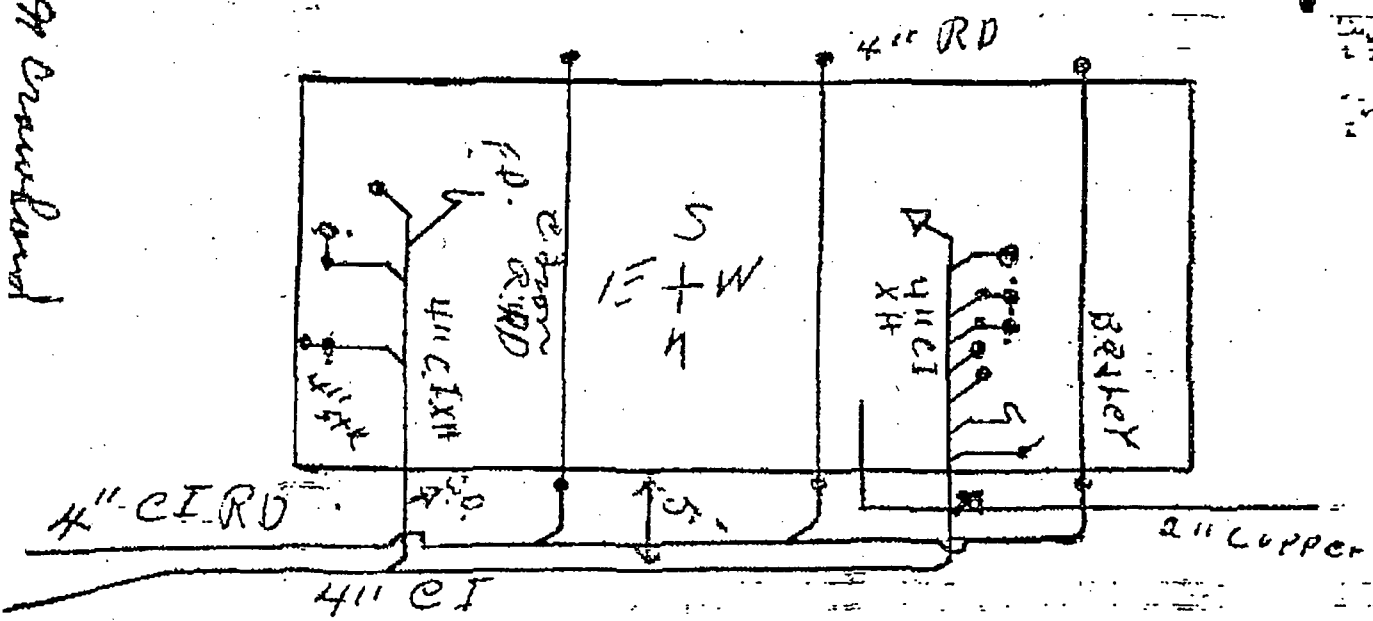
Book 6 Page 491 New ☒ Repair  
10 152



REPORT OF PLUMBING INSPECTION  
Address 8424 North Crawford Street Permit 175971  
Lot 2,3,6,7 Blk 6 Add St. Johns  
Owner Skookum Co.  
Contractor Rowland Plumbing  
Stories and class of building New forge & machine bldg  
Water Closets 4 Hot-Water Tank 2 Cesspool  
Bath, Shower Auto. Clothes Washer Septic Tank  
Bath Tub Auto. Dishwasher Dry Well  
Basins 2 Drain Floor 2 Water Service 1  
Sinks 1 Drain Area Connect to Sewer 2  
Laundry Trays Rain Drains 6 Cesspool, Septic Tank  
Water Permit 20283 Bldg. Pmt. 467703 Sewer Permi 91293-4  
Remarks Bradley W E 1. Urinals 2. fountains 1.  
plan fee \$3.  
Date of First Inspection 1-13-72 Date of Final Inspection 8-15-72  
Inspector [Signature] Inspector [Signature]

99 Crawford

99 Crawford



out side work caused without inspection

Form W  
(5-59)

BUREAU OF BUILDINGS  
REPORT OF PLUMBING INSPECTION

Date 7-24-63

Address 8524 N. Crawford

Permit 121421

Lot        Blk        Add       

Owner Skookum Co., Inc.

Contractor Donohue & Fleskes Corp.

Stories and class of building New - one

Toilets        Floor Drains        Beer Cab.       

Bath Tubs        Rain Drains 2 Refr. Drains       

Bath Showers        Fountains 1 Urinals       

Basins        H. W. Tanks        Catch Basins Yd-1

Sinks        Cesspool        Water Service       

Laundry Trays        Dry Wells        Conn. To       

Water Permit        Bldg. Pmt.        Sewer Permit       

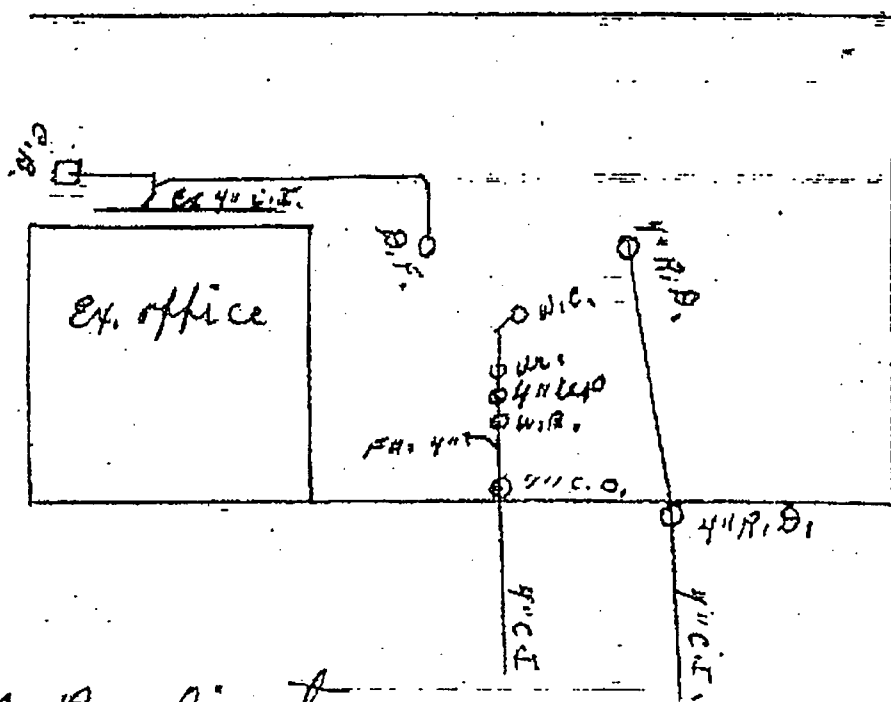
Remarks       

Date of First Inspection 8-9-63 Date of Final Inspection 4-27-63

Walt Bonney Inspector

[Signature] Inspector

M. Crawford



N. Burlington

Address 8504 N. Crawford

Permit 46597

Lot: Blk 5 Add. James John

Owner Shookum Co.

Contractor Emmert Bros.

Stories and class of building 1-story old warehouse

Toilets 2 Floor Drains Beer Cab.

Bath Tubs Rain Drains 1 move Refr. Drains

Bath Showers Fountains Urinals

Basins 2 H. W. Tanks 1 Catch Basins

Sinks 1 Cesspool Water Service

Laundry Trays Dry Wells Conn. To

Water Permit Bldg. Pmt. 341360 Sewer Permit

Remarks See 8874

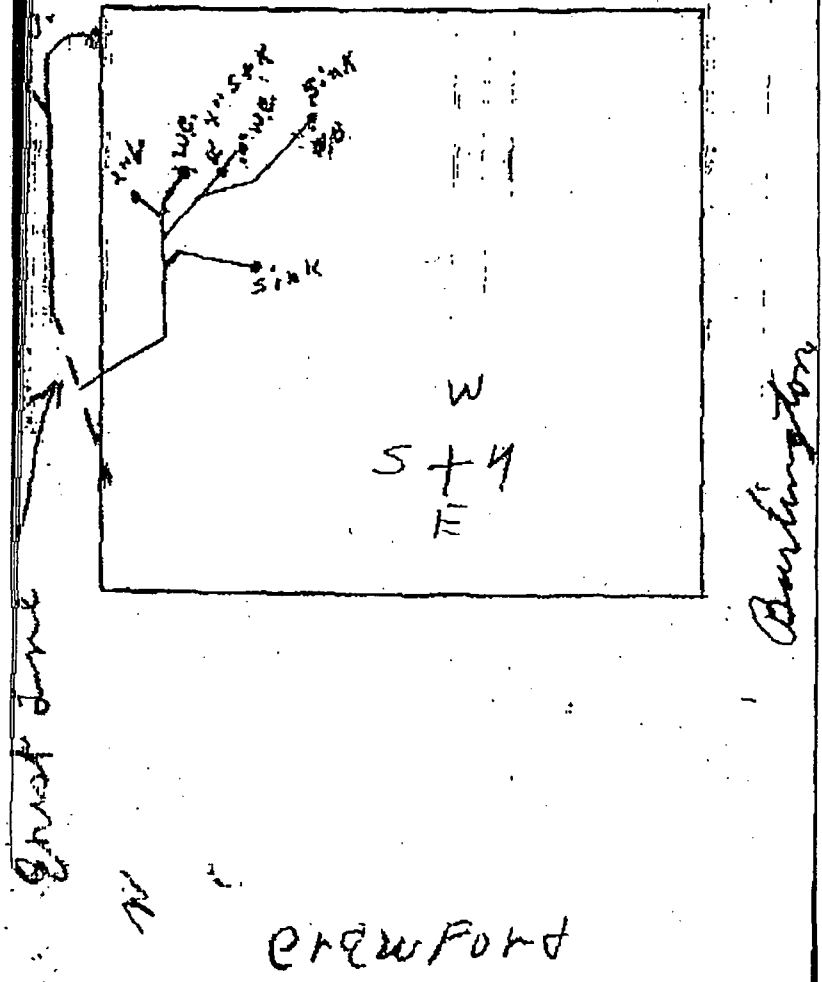
SEE 6630 N. Burlington

Date of First Inspection 2-10-54 Date of Final Inspection 6-18-54

Inspector Walt Bonney Inspector



1-W.C. 4" V to ROOF  
1- W.C. 2" to 4" V  
2-W.B. 1-sink 1 1/2" to 2" W.C.  
2-10-54



Address 8504 N. Crawford

Permit 20660

Lot Bk Add

Owner Skookum Company

Contractor Emmert Brothers

Stories and class of building old factory

Toilets Floor Drains Beer Cab

Bath Tubs Rain Drains Refr. Drains

Bath Showers Fountains Urinals

Basins H. W. Tanks Catch Basins I

Sinks Cesspool Water Service

Laundry Trays Dry Wells Conn. To

Water Permit Bldg. Pmt Sewer Permit

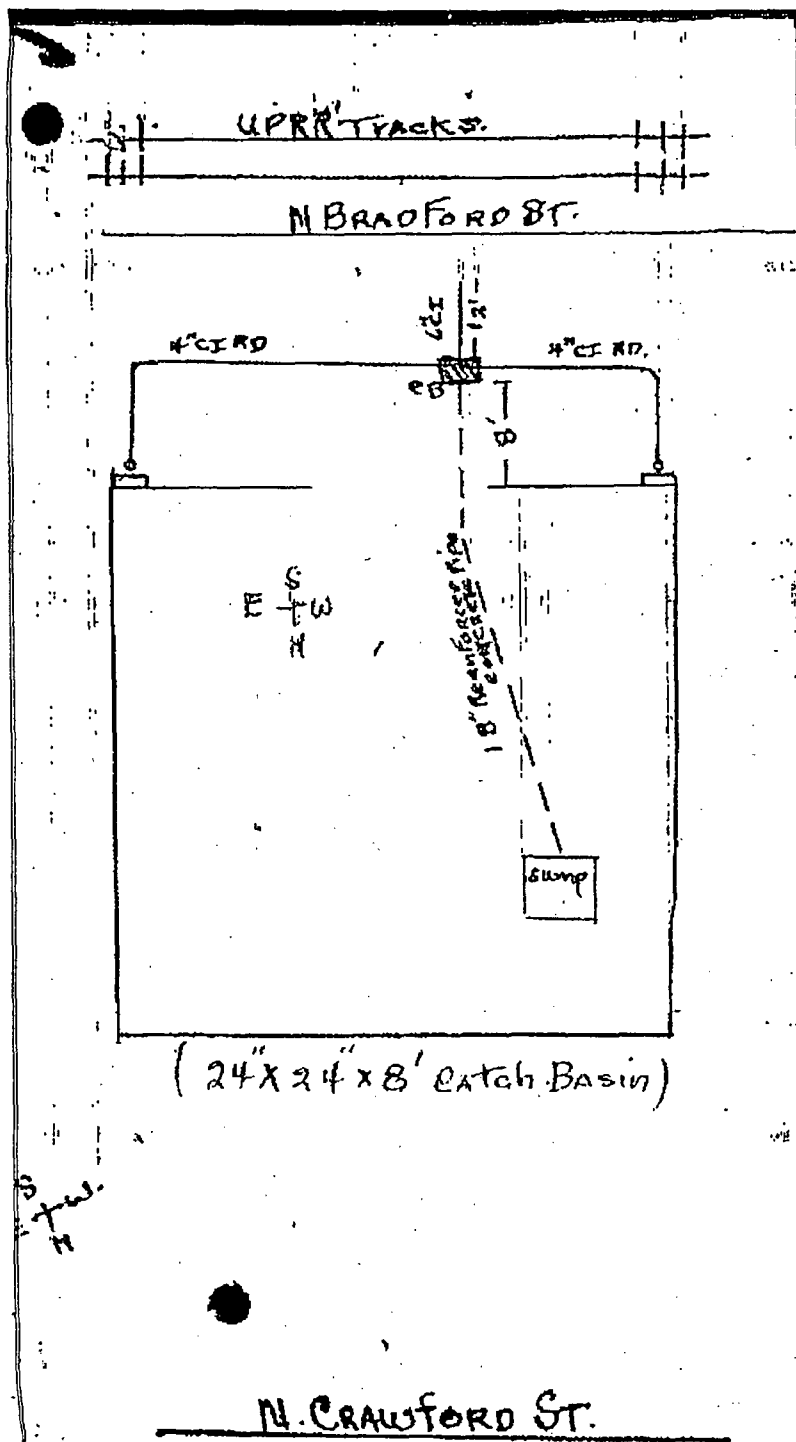
Remarks Condensate - DRAIN FROM STEAM HAMMERS

Date of First Inspection 12-19-51

Date of Final Inspection 2-2-51

L.D.W. Inspector

X. W. Water Inspector



0076473  
COP/EPA 104(e)

BUREAU OF BUILDINGS  
REPORT OF PLUMBING INSPECTION

Date 2/29/44

Address 8504 N. Crawford St.

Permit 164426

Lot \_\_\_\_\_ Blk \_\_\_\_\_ Add \_\_\_\_\_

Owner Skookum Company

Contractor Kendall Heating Co.

Stories and class of building 1 story frame shop

Toilets 2 Floor Drains 1 Beer Cab \_\_\_\_\_

Bath Tubs \_\_\_\_\_ Rain Drains 1 Refr. Drains \_\_\_\_\_

Bath Showers \_\_\_\_\_ Fountains \_\_\_\_\_ Urinals 1

Basins 1 H. W. Tanks \_\_\_\_\_ Catch Basins \_\_\_\_\_

Sinks \_\_\_\_\_ Cesspool \_\_\_\_\_ Water Service \_\_\_\_\_

Laundry Trays \_\_\_\_\_ Dry Wells \_\_\_\_\_ Connected to Sewer

Water Permits 157693 Sewer Permit 48385

Other Plumbing Fixtures One sewer connection to sewer in yard.

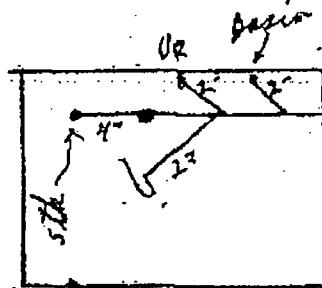
Date of First Inspection 3-1-44 Date of Final Inspection 5-22-44

H. H. Callahan Inspector. H. H. Callahan Inspector

Date of First Certificate \_\_\_\_\_ Date of Final Certificate \_\_\_\_\_

- 1-W.C. on 4" stack
- 1-W.C. 2" to 3" stack
- 1-Urinal 1 1/2" into 2" to 3" stack
- 1- Basin 1 1/2" into 1 1/2" Urinal Vent

New Toilet Room



Shop

Office and 1/2 shop

0076475  
COP/EPA 104(e)

N. CRAWFORD ST.

BUREAU OF BUILDINGS  
REPORT OF PLUMBING INSPECTION

Date 6-24-38

Address 8504 N. Crawford street

Permit 130464

Lot 121 Blk. 77 Add. St. Johns

Owner Skookum Co.

Contractor John H. Kaye &amp; Son

Stories and class of building 1 story new frame machine shop

Toilets 1 Laundry Trays Beer Cabinets

Bath Tubs Floor Drains Refr. Drains

Bath Showers 1 Rain Drains 2 Urinals 1

Basins Fountains Catch Basins

Sinks 1 Bar-Slop Sinks Water Service

No. and Size of Stacks Connected to sewer

Water Permits 123882 Sewer Permit

Other Plumbing Fixtures

Sewer has  $\frac{1}{8}$  fall per foot

Water on property.

Date of First Inspection 6-28-38 Date of Final Inspection 8-23-38

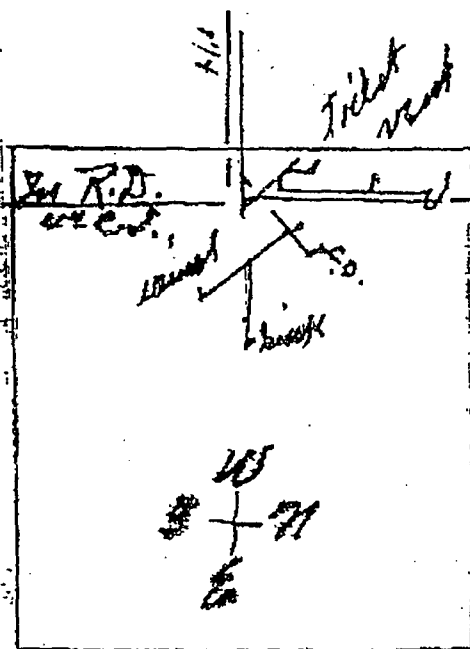
Inspector. Inspector.

Date of First Certificate Date of Final Certificate

around 100' only

Trick to attack

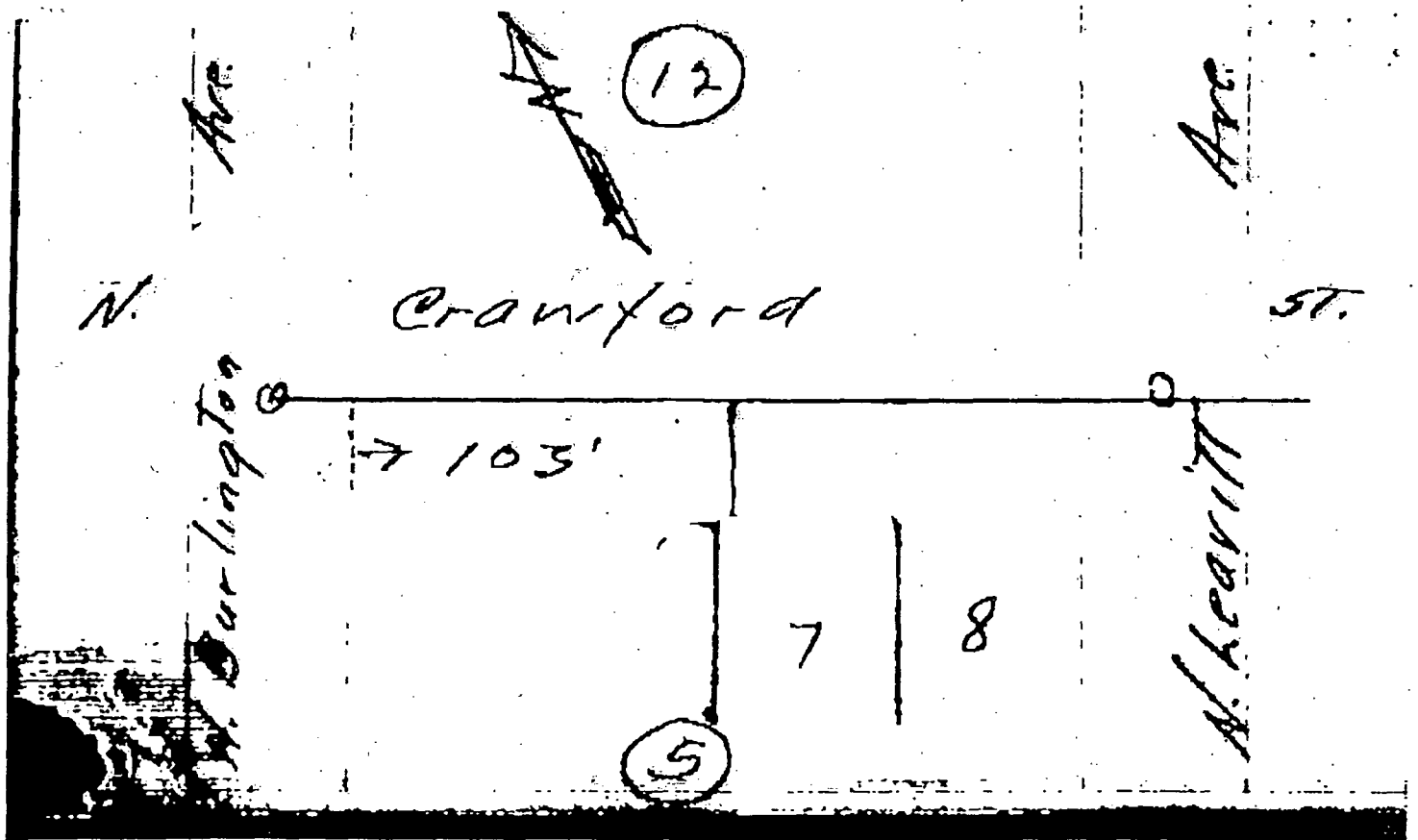
"Chest Shove" to 4x2 in  
back 1/2 to 4x2 in



COP/EPA 104(e)

0076477

Completed



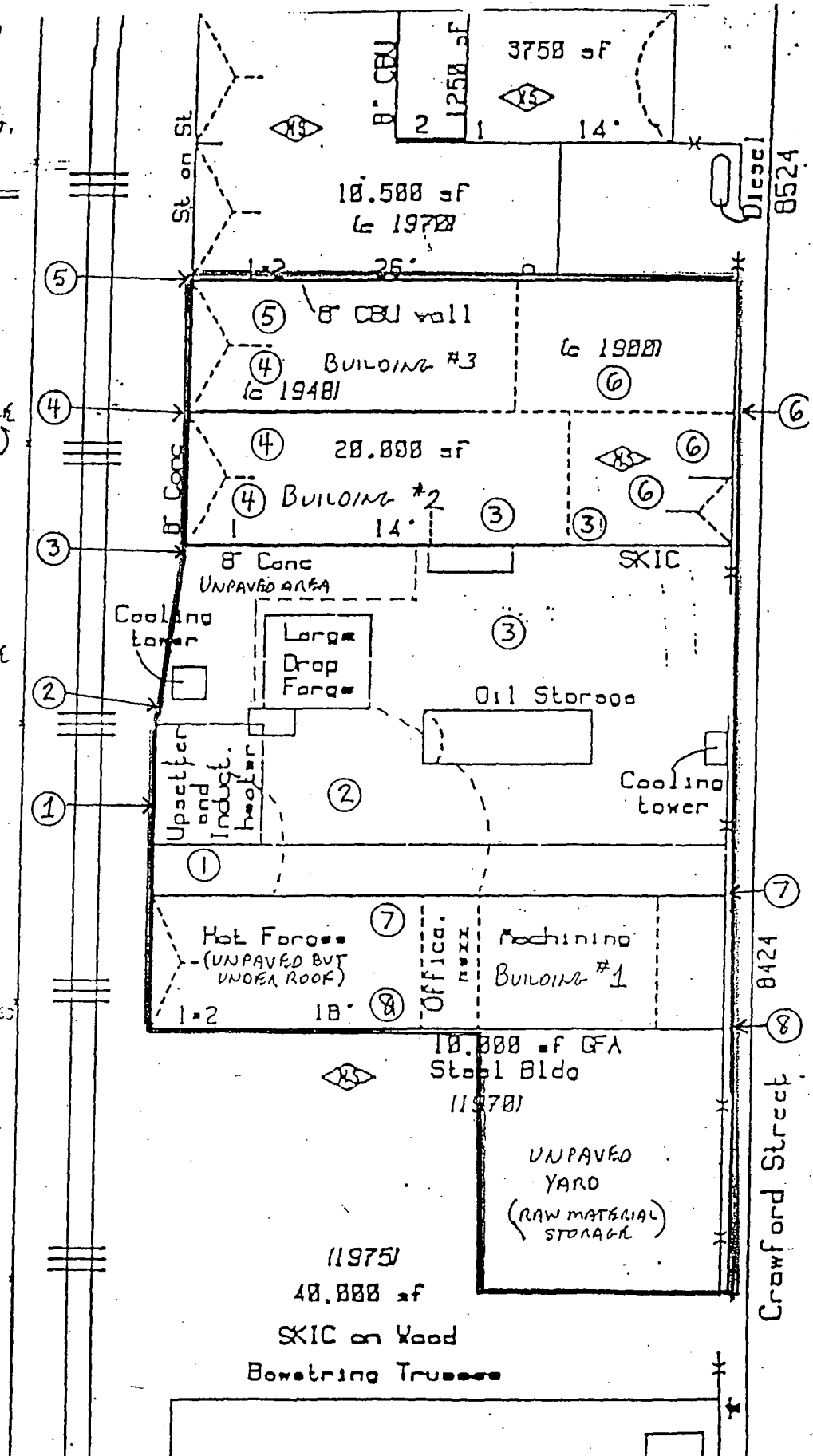
COLUMBIA FORGE AND  
MACHINE WORKS  
8424 N. CRAWFORD ST.  
PORTLAND, OR 97203

1. FACILITY BOUNDARY IN  
REQ.
2. ① DENOTES STORM  
DISCHARGE OUTFALLS
3. ① DENOTES DRAINAGE  
AREAS (ROOF + SURFACE)
4. OUTFALLS 4, 5, 7 + 8  
CONNECT TO CITY;  
BALANCE DRAIN TO THE  
SURFACE.
5. ONLY THE UNPAVED  
RAW MATERIAL STORAGE  
YARD AND THE AREA  
BETWEEN BUILDINGS  
#1 AND #2 ARE  
UNCOVERED.

Bureau of Environmental Services  
RECEIVED

AUG 07 1992

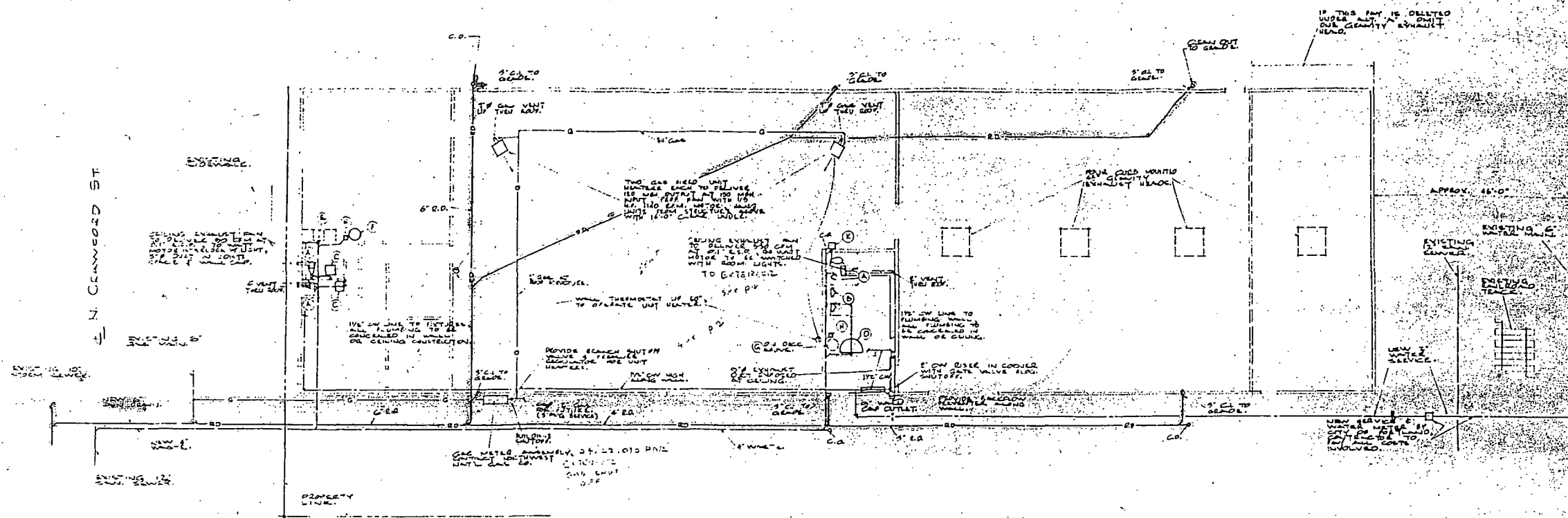
SOURCE CONTROL MANAGEMENT



0076479  
COP/EPA 104(e)

## **Attachment 2**

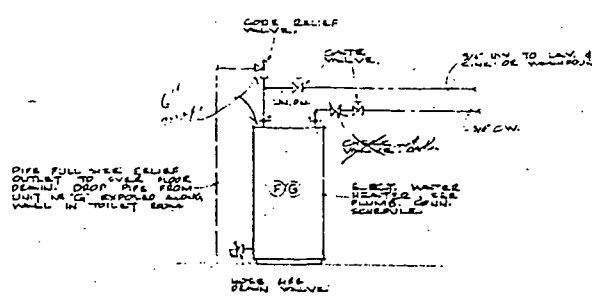
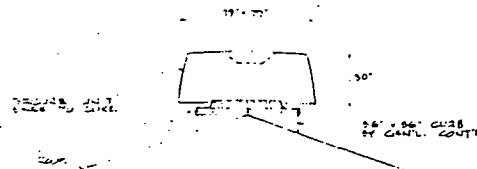
By 24  
N. Crawford



NORTH  
MECHANICAL PLAN  
1/8" = 1'-0"

city copy

EXISTING GAS PIPING TO BE REMOVED AND REPLACED WITH NEW GAS PIPING.



4" x 11"

PLUMBING CONNECTION SCHEDULE

NO.	DESCRIPTION	QUANTITY	UNIT
1	1/2" DIA. GALV. STEEL PIPING	100	FEET
2	3/4" DIA. GALV. STEEL PIPING	50	FEET
3	1" DIA. GALV. STEEL PIPING	20	FEET
4	1 1/2" DIA. GALV. STEEL PIPING	10	FEET
5	2" DIA. GALV. STEEL PIPING	5	FEET
6	3" DIA. GALV. STEEL PIPING	2	FEET
7	4" DIA. GALV. STEEL PIPING	1	FEET
8	1/2" DIA. BRASS VALVES	10	PIECES
9	3/4" DIA. BRASS VALVES	5	PIECES
10	1" DIA. BRASS VALVES	2	PIECES
11	1 1/2" DIA. BRASS VALVES	1	PIECES
12	2" DIA. BRASS VALVES	1	PIECES
13	3" DIA. BRASS VALVES	1	PIECES
14	4" DIA. BRASS VALVES	1	PIECES
15	1/2" DIA. BRASS ELBS	20	PIECES
16	3/4" DIA. BRASS ELBS	10	PIECES
17	1" DIA. BRASS ELBS	5	PIECES
18	1 1/2" DIA. BRASS ELBS	2	PIECES
19	2" DIA. BRASS ELBS	1	PIECES
20	3" DIA. BRASS ELBS	1	PIECES
21	4" DIA. BRASS ELBS	1	PIECES
22	1/2" DIA. BRASS TEES	10	PIECES
23	3/4" DIA. BRASS TEES	5	PIECES
24	1" DIA. BRASS TEES	2	PIECES
25	1 1/2" DIA. BRASS TEES	1	PIECES
26	2" DIA. BRASS TEES	1	PIECES
27	3" DIA. BRASS TEES	1	PIECES
28	4" DIA. BRASS TEES	1	PIECES
29	1/2" DIA. BRASS COUPLERS	10	PIECES
30	3/4" DIA. BRASS COUPLERS	5	PIECES
31	1" DIA. BRASS COUPLERS	2	PIECES
32	1 1/2" DIA. BRASS COUPLERS	1	PIECES
33	2" DIA. BRASS COUPLERS	1	PIECES
34	3" DIA. BRASS COUPLERS	1	PIECES
35	4" DIA. BRASS COUPLERS	1	PIECES
36	1/2" DIA. BRASS UNIONS	10	PIECES
37	3/4" DIA. BRASS UNIONS	5	PIECES
38	1" DIA. BRASS UNIONS	2	PIECES
39	1 1/2" DIA. BRASS UNIONS	1	PIECES
40	2" DIA. BRASS UNIONS	1	PIECES
41	3" DIA. BRASS UNIONS	1	PIECES
42	4" DIA. BRASS UNIONS	1	PIECES
43	1/2" DIA. BRASS REDUCERS	10	PIECES
44	3/4" DIA. BRASS REDUCERS	5	PIECES
45	1" DIA. BRASS REDUCERS	2	PIECES
46	1 1/2" DIA. BRASS REDUCERS	1	PIECES
47	2" DIA. BRASS REDUCERS	1	PIECES
48	3" DIA. BRASS REDUCERS	1	PIECES
49	4" DIA. BRASS REDUCERS	1	PIECES
50	1/2" DIA. BRASS ADAPTERS	10	PIECES
51	3/4" DIA. BRASS ADAPTERS	5	PIECES
52	1" DIA. BRASS ADAPTERS	2	PIECES
53	1 1/2" DIA. BRASS ADAPTERS	1	PIECES
54	2" DIA. BRASS ADAPTERS	1	PIECES
55	3" DIA. BRASS ADAPTERS	1	PIECES
56	4" DIA. BRASS ADAPTERS	1	PIECES
57	1/2" DIA. BRASS END CAPS	10	PIECES
58	3/4" DIA. BRASS END CAPS	5	PIECES
59	1" DIA. BRASS END CAPS	2	PIECES
60	1 1/2" DIA. BRASS END CAPS	1	PIECES
61	2" DIA. BRASS END CAPS	1	PIECES
62	3" DIA. BRASS END CAPS	1	PIECES
63	4" DIA. BRASS END CAPS	1	PIECES

GRAVITY EXHAUST HEAD

WATER HEATER PIPING

FORGE & MACHINE BUILDING FOR THE SKOOKUM CO. INC. PORTLAND OREGON

SKOOKUM CO. INC. 712-03

MECHANICAL PLAN & DETAILS

M1 OF 1

ARTHUR L. BOONE, ARCHITECT  
BOYMAN & BOYMAN, INC.  
2023 S. TULLY STREET, PORTLAND, OREGON 97204

DATE: MAY 1, 1971

CHECKED: T.E.

DRAWN: C.A.L.

NO. DATE

REVISIONS

## **Attachment 3**



Photo taken 1-25-02: Crawford Street Corp. -- pathway to cottonwood swale.jpg

0076483  
COP/EPA 104(e)

## Attachment 4

0076484  
COPI/EPA 104(e)

Figure 7









Bureau of Environmental Services

**WATER  
POLLUTION  
CONTROL  
LABORATORY**

6543 N. Burlington Ave

**Existing Stormwater  
Facilities  
and Impervious Areas**

**Legend**

-  Storm Pipe
-  Swale
-  Infiltration Swale
-  Retention Pond
-  Inlet
-  Property Line
-  Culvert
-  Direction of Surface Flow



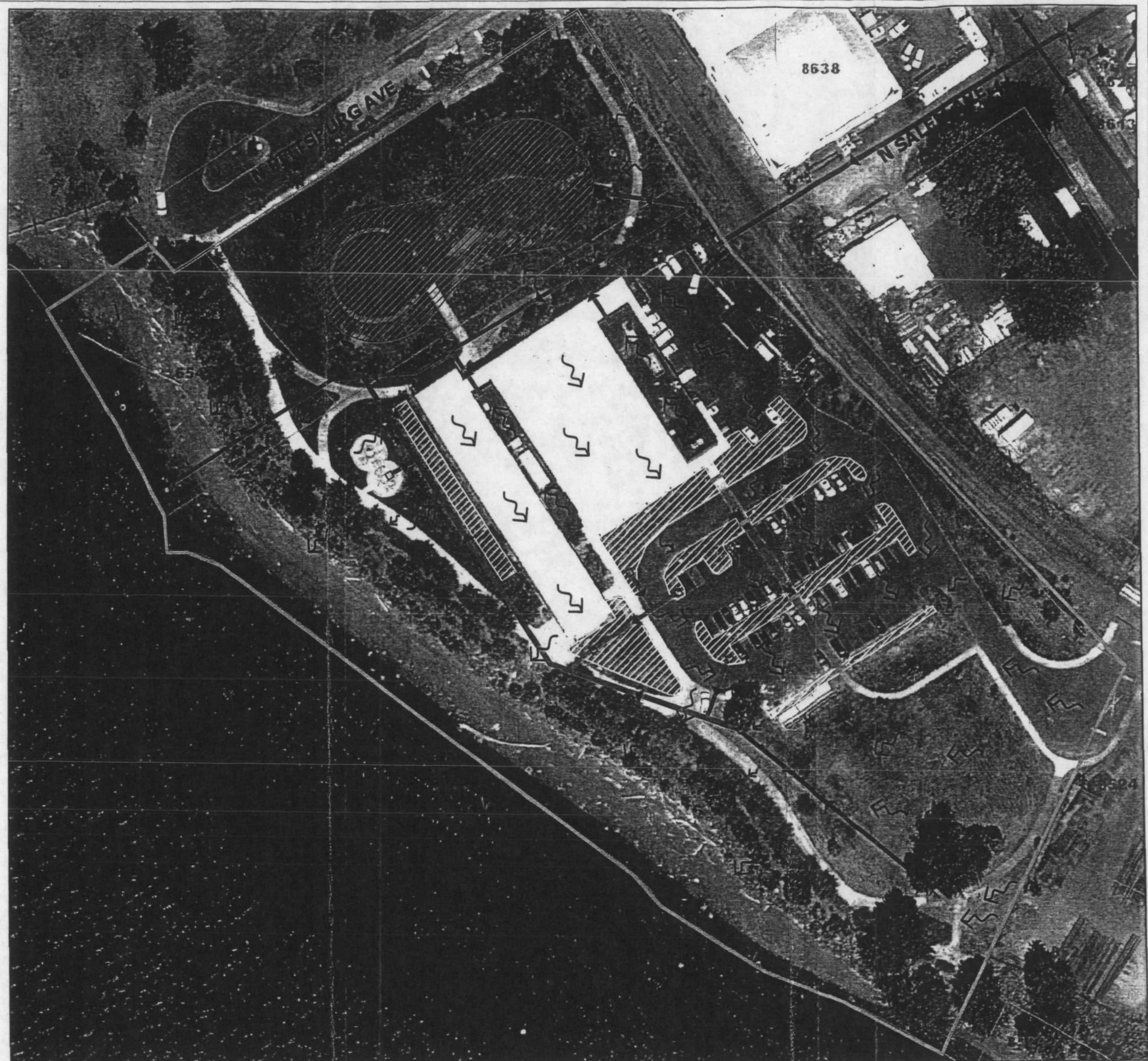
SCALE 1" = 84'



CITY OF PORTLAND  
**ENVIRONMENTAL SERVICES**

Date: 7/25/06

Created by: Casey Cunningham



0076485  
COP/EPA 104(e)



# Oregon

Theodore Kulongoski, Governor

## Department of Environmental Quality

Northwest Region Portland Office

2020 SW 4<sup>th</sup> Avenue, Suite 400

Portland, OR 97201-4987

(503) 229-5263

FAX (503) 229-6945

TTY (503) 229-5471

October 24, 2006

*Also sent by e-mail*

Matt Cusma  
Schnitzer Steel Industries  
P.O. Box 10047  
Portland, Oregon 97296-0047

RE: Storm Water Evaluation Plan  
Crawford Street Corporation Site  
8424 and 8524 N. Crawford Street, Portland, Oregon  
ECSI #2363

Dear Mr. Cusma:

The Department of Environmental Quality (DEQ) reviewed the September 21, 2006 *Preliminary Source Control Evaluation, Sampling and Analysis Plan* for the above-referenced site and has the following comments:

### Site Storm Water Runoff Features

1. Please provide a figure showing storm water drainage basins and including flow directions of all piped and overland storm water. It is difficult to determine whether the proposed two storm water sampling locations adequately evaluates storm water of potential concern. For example, off-site storm water run-on (show adjacent properties and operational areas), roof drain discharges to City of Portland conveyance pipes, overland flow off site to the southwest, abandoned pipe outfalls to the Willamette River, and other surface drainage points from the southern parcel to the Willamette River need to be shown as a basis for selecting sampling locations.
2. According to the 2006 *Preliminary Assessment* of the City of Portland Water Pollution Control Laboratory (WPCL) and conversations with City of Portland staff, overland storm water flows from the subject site into the WPCL storm water system and eventually discharges to the Willamette River at City Outfall #50. Therefore, overland flow off site to the southwest should be sampled, analyzed, and evaluated.
3. Roof drainage from buildings on the subject property should be evaluated since it can potentially convey site contaminants to the Willamette River.
4. Co-mingling of off-site storm water run-on is not justification to ignore evaluation of the receiving on-site storm water. Samples should be collected from the run-on and subject site run-off in that drainage basin to evaluate the contribution of on- and off-site sources. It is not clear if the central portion of the North Area is a potential drainage basin of concern or that all storm water in basins of potential concern flow through the sand filter box.



0076486  
COP/EPA 104(e)

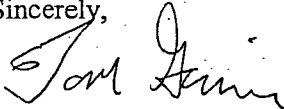
5. Current activities and use of the South Area are not clear.

Storm Water Pathway Screening

6. Contaminants have been detected in surface soils throughout the site and the Joint Source Control Strategy (JSCS) specifies that catch basin solids should be collected to screen the site for potential site contaminants that may be present in storm water. For example, the 2001 Expanded Preliminary Assessment surface soil results in the vicinity of Columbia Forge and the railroad right-of-way showed levels of chromium, copper, nickel, zinc, polycyclic aromatic hydrocarbons (PAHs), and Total Petroleum Hydrocarbons (TPH) that exceed the Portland Harbor erodible soil and catch basin screening levels; however, it is not clear if such contaminants are migrating to the river via storm water. The DEQ requires evaluation of both liquid and solid contaminants that may be migrating to the Willamette River. Catch basin solids sampling from the Columbia Forge operations area will address these concerns and whether storm water best management practices or other source control measures are warranted.
7. The plan states that "The storm water samples will be collected in a manner that minimizes the suspended particles." As discussed above, evaluation includes both liquids and solids in storm water and no attempt to minimize (or filter) solids should be made during sampling.
8. The plan should address the JSCS requirements regarding storm criteria, number of sampling events (four), and that two of the four samples be first flush conditions.
9. The two proposed sample locations do not represent all storm water discharges from the site. Following delineation of site drainage basins, additional sampling locations should be proposed to represent roof runoff and overland discharges.
10. Grain size analysis and total organic carbon should be performed on catch basin solids in addition to site COIs. These parameters will help evaluate what type of sediment is accumulating in the catch basin and its potential to migrate past the catch basin towards the river.

Please incorporate changes to address these comments in a revised work plan and submit it within 30 days. Please call me at (503) 229-5326 if you have questions.

Sincerely,



Tom Gainer, P.E.  
Project Manager  
Portland Harbor Section

cc: Ross Rieke, Bridgewater Group  
Tom Roick, DEQ NWR  
Linda Scheffler, BES

0076487  
COP/EPA 104(e)





# CITY OF PORTLAND ENVIRONMENTAL SERVICES



1120 SW Fifth Avenue, Room 1000, Portland, Oregon 97204-1912 ■ Sam Adams, Commissioner ■ Dean Marriott, Director

December 7, 2006

Mr. Tom Gainer  
Department of Environmental Quality  
2020 SW 4<sup>th</sup> Avenue, Suite 400  
Portland, OR 97201-4987

Subject: Revised Preliminary Source Control Evaluation Sampling and Analysis Plan,  
Crawford Street Site, Portland, Oregon

Dear Mr. Gainer:

The City of Portland Bureau of Environmental Services (BES) has reviewed the revised Preliminary Source Control Evaluation Sampling and Analysis Plan (Sampling Plan), dated November 22, 2006, prepared by the Bridgewater Group, Inc. for the Crawford Street Corporation (CSC). CSC submitted an initial Sampling Plan to the Oregon Department of Environmental Quality (DEQ) in September 2006. The City submitted comments on the initial plan to DEQ on October 13, 2006, following an evaluation of potential contaminant discharges to adjacent City stormwater conveyance systems discharging to Outfall Basins 50 and 52.

The City appreciates the efforts by DEQ and CSC to develop a revised sampling plan that facilitates a stormwater pathway evaluation consistent with the DEQ/EPA Portland Harbor Joint Source Control Strategy (JSCS). In support of this objective, the City offers the following two general comments.

- Selected sampling locations represent only four of the eight CSC site drainage basins identified with offsite stormwater discharges. According to City records, roof drains discharge to the City stormwater systems on N. Crawford Street and N. Burlington Ave. None of the locations represent runoff from the three basins composed entirely of roof drainage. Metals have been observed in roof drain runoff from industrial operations (e.g. Galvanizers Company) and metals have been detected in river sediment in the vicinity of the CSC site. Representative roof drain runoff should be screened as part of this evaluation.
- The stormwater pathway screening approach is inconsistent with the JSCS because it does not include sampling and analysis of catch basin or inline solids. The JSCS identifies the potential for piped stormwater or sheet flow discharges to suspend, transport, and redeposit solids through a site's stormwater system. Analysis of stormwater solids for site contaminants of interest (COIs) is needed for the weight-of-evidence evaluation of the site stormwater pathway. CSC COIs have been detected in site surface soil, as well as in the railroad right-of-way (ROW). A comparison of site catch basin and/or storm filter solids concentrations to

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upgradient and site surface soil samples is needed for contaminant source identification and control.

Specific comments are presented below.

Site Conditions and Storm Water Runoff Features

1. The Sampling Plan describes five drainage basins in the text, and also describes four areas with no discharge due to infiltration. Three separate roof drainage areas have been delineated, and have point discharges, but have not been assigned drainage basin status. The general site description should be revised to reflect that there are eight drainage basins on site, and should describe the operations within and adjacent to buildings in each roof drainage basin to ascertain their respective contaminant source potential.
2. Drainage Basin B: the description should be revised to reflect that stormwater flows to the southwest corner of the basin, rather than to the southeast.
3. Drainage Basin E: City plumbing records indicate that catch basins are connected to the City storm system on N. Crawford St. CSC should clarify this point of discharge (e.g. perform a dye test).
4. Roof Drains: City plumbing records indicate that roof drains are connected to City stormwater lines in N. Crawford St. and N. Burlington Ave., which discharge to the river via Outfall 52. The Sampling Plan does not clearly identify the flow direction of roof drain discharges or whether roof drains discharge to City stormwater or sanitary conveyances. Stormwater discharges to the sanitary sewer are prohibited by City code. CSC should review site records and if necessary, dye test or survey the adjacent conveyance systems to determine and accurately document all offsite discharge pathways.
5. Roof Drains: the statement that runoff from the building roofs is not representative of hazardous substances released from site operations is unsupported. In general, roofs have the potential to accumulate substances emitted during industrial operations. Specifically at the CSC Site, the Columbia Forge building's roof vents (visible in aerial photos) provide a pathway for releases to the roof and City employees at the adjacent Water Pollution Control Lab have observed significant mobilization of particulates up to the height of the roof from onsite traffic such as forklifts.

Storm Water Pathway Screening

6. The proposed screening approach is inadequate because it includes only stormwater samples, from selected discharge areas, to assess potential contaminant contributions from the site to the Willamette River. If site catch basin or inline solids are not representative of site discharges, surface solids samples should be collected from each of the overland drainage stormwater sampling locations to ascertain whether surface soil contaminants are being transported off site via stormwater.
7. The proposed screening of Drainage Basin A is inadequate. Drainage Basin A includes the Columbia Forge operations area; stormwater from this area is collected in catch basins and conveyed to a sand filter on site. During heavy rain, stormwater is discharged from the sand filter to the railroad ROW. A pollution complaint

upgradient and site surface soil samples is needed for contaminant source identification and control.

Specific comments are presented below.

#### Site Conditions and Storm Water Runoff Features

1. The Sampling Plan describes five drainage basins in the text, and also describes four areas with no discharge due to infiltration. Three separate roof drainage areas have been delineated, and have point discharges, but have not been assigned drainage basin status. The general site description should be revised to reflect that there are eight drainage basins on site, and should describe the operations within and adjacent to buildings in each roof drainage basin to ascertain their respective contaminant source potential.
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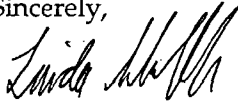
Mr. Tom Gainer  
December 7, 2006

received by the City in 2004 (attached) and referred to the DEQ Duty Officer indicated that leaking PCB transformers may have been present at the Columbia Forge operations area. Prior to the railroad modification of the rail crossing on N. Burlington Ave., stormwater from the railroad ROW was observed to flow across N. Burlington Ave. to a catch basin connected to Outfall 52. To evaluate contributions to surface soil contamination in the railroad ROW, the City recommends sampling a catch basin in the Columbia Forge operations area and retaining the sand filter stormwater sampling point proposed in the previous Sampling Plan.

8. A sampling location should be added to screen current discharges to Outfall 52 as part of the stormwater pathway evaluation. City records indicate that runoff from a portion of the roofed areas onsite discharges to Outfall 52.
9. Stormwater sampling methodology is incomplete. The three proposed stormwater sampling locations represent overland discharges. Collecting representative samples of overland runoff can be challenging and therefore sample collection methodology should be presented to ensure that methods will meet sampling objectives. Additional recommended sampling locations - roof drain and sand filter discharges - will require different sampling techniques.
10. The Sampling Plan should present the target method detection limits for all site COIs.
11. The "first flush" conditions represent the first 30 minutes of observable stormwater runoff at a given sampling location, rather than the first 30 minutes of a rainfall event. Sample collection activities should be timed accordingly.
12. Figure 2 is incomplete and should be revised to include site conveyances (e.g. on-site piping and lateral connections, roof drains, and outfalls) and adjacent City stormwater and sanitary collection systems

Thank you for your consideration of these comments. Please contact me at 503-823-2296 if you have any questions or need additional information.

Sincerely,



Linda Scheffler  
Water Resources Program Manager  
Superfund Program

Attachment: Pollution Complaint

cc: Tom Roick/DEQ  
Kristine Koch/EPA  
Dawn Sanders/ City of Portland  
Rick Applegate/City of Portland  
Michael Pronold/City of Portland  
Bruce Brody-Heine/GSI

AQUARIUS connected to server FA1STAFF

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## Pollution Complaints - COLUMBIA FORGE & MACHINE

Row 1 of 3 Organization Summary List 1

Org ID	Organization Name	Num Quad	Street	Zip Code	Phone	Glass	Deed by	Watch	UMS	CSO	Updated	By	
961	COLUMBIA FORGE & MACHINE	18424	N CRAWFORD	97206	503-286-3621	NP-3	SWS	142			Aug 05, 1997	roberto	PORTLAND

Row 2 of 3

### Pollution Complaint 2

PC ID	Date Received	Maken by	Complaint type	Pollution type	Pollutant type
5010	06/09/04 10:02	Sears, Cloudy	Industrial	Ground	Oil/Fuel
<p>Desc: Former empl compl oil soaked ground, leaking PCB transformers, grinding dust. Concerned about soils, stormwater discharge to river, and health &amp; safety issues. Ref to DEQ DO @ 10:47. BES Projects, and provided OSHA phone no's</p>					
Assigned to		Satisfied	State Plane Coprds: NAD83		Updated By
Sears, Cloudy		<input checked="" type="radio"/> Yes <input type="radio"/> No			06/09/04 11:13 CLOUDYS

Referred? ☒ Yes ☐ No

PC ID	PC ID	State	City	State	Ref	Other
5010	5010	OR	Portland	OR	DEQ	Other

Query  
Sort  
Save  
Print  
Sheet  
Report  
Save Query  
Next Page  
Prior Page  
Read Only  
Clone  
Citizen  
Export  
Close

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# Oregon

Theodore Kulongoski, Governor

## Department of Environmental Quality

Northwest Region Portland Office

2020 SW 4<sup>th</sup> Avenue, Suite 400

Portland, OR 97201-4987

(503) 229-5263

FAX (503) 229-6945

TTY (503) 229-5471

February 14, 2007

*Also sent by e-mail*

Matt Cusma  
Schnitzer Steel Industries  
P.O. Box 10047  
Portland, Oregon 97296-0047

RE: Revised Storm Water Evaluation Plan  
Crawford Street Corporation Site  
8424 and 8524 N. Crawford Street, Portland, Oregon  
ECSI #2363

Dear Mr. Cusma:

The Department of Environmental Quality (DEQ) reviewed the November 22, 2006 *Preliminary Source Control Evaluation, Sampling and Analysis Plan* for the above-referenced site. This revised document incorporated responses to DEQ's comments on the initial version of the plan dated September 21, 2006. Most of the responses to DEQ comments are adequate; however, some issues remain and the revision prompted additional comments.

### General Comment

The DEQ and the City of Portland are working jointly on evaluation of the storm water pathway in Portland Harbor. Comments on the Sampling and Analysis Plan were provided by the City of Portland and are attached for reference. DEQ does not expect all site stormwater catch basins and points of stormwater discharge to be sampled, but does require sampling to be representative of the site conditions including areas where stormwater impacts are most likely. Our comments below are focused on the issues of most concern. If the results of this work indicate that screening levels are exceeded, a more comprehensive sampling approach may be required.

### Specific Comments

1. Roof drainage from buildings on the subject property that discharge to the Willamette River by storm water conveyance pipe or overland flow should be evaluated since it can potentially convey site contaminants to the Willamette River. This potential pathway is being consistently evaluated at upland Portland Harbor sites and in some instances has shown to be a significant contaminant source, from the roofing materials and deposition of site contaminants on to the roof.



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2. Response to DEQ Comments 3 and 6. The City indicates that roof and parking lot discharges appear routed to the City storm sewer which discharges to Outfall 52 (i.e., there are no discharges to "sanitary" sewer as indicated in the response to comments and Sampling and Analysis Plan). Stormwater sampling must be conducted at a location that receives runoff from the three areas of roof drainage indicated in Figure 2.
3. Response to DEQ Comment 6. DEQ disagrees that sediment sampling from the Area E catch basins "would not be representative of storm water runoff from the Site given that no industrial operations are conducted in this small area." Sampling within Area E would appear to be representative of parking area runoff from the Site. In order to focus the investigation, DEQ is not requesting sampling of these catch basins at this time under the presumption that proposed sampling in other areas will be more representative of potential adverse impacts to stormwater.
4. The document implies that there is no overland flow from the South Area yard (i.e., drainage basins B and C, the central "3.6-acre infiltration area," and the "1.7-acre infiltration area" along the bluff) directly (i.e., perpendicularly) to the beach and the Willamette River. The DEQ understands that this conclusion was based on recent observations during a rain event; however, information from the site Preliminary Assessment (2/4/02) and Black Sand Removal activities (2/26/02) indicate possible storm water transport of upland black sand contamination to the adjacent beach. DEQ plans a site visit during a rain event to confirm that there is no overland flow directly to the river.
5. Sampling and Analysis Plan, Page 4. Response to DEQ Comment 6 indicates that catch basin sampling in the Columbia Forge operations area would not be representative, and little surface soil data has been collected at the site. To provide soil data representative of the potential storm water contribution to the Willamette River, surface soil should be sampled at proposed locations SW-1, SW-2, and SW-3. Samples should be analyzed for the site contaminants of interest, TOC, and grain size (Response to DEQ Comment 6 and 10). Analytical results should be compared to PEC screening level values in DEQ's *Joint Source Control Strategy*.


Please incorporate changes to address these comments in a revised work plan and submit it within 30 days. As stated previously, the DEQ requests that the storm water plan be implanted during the current wet season, so your assistance in expediting these revisions and implementing the plan would be appreciated.



Mr. Matt Cusma  
February 14, 2007  
Page 3 of 3

Please call me at (503) 229-5326 if you have questions.

Sincerely,



Tom Gainer, P.E.  
Project Manager  
Portland Harbor Section

Attachment:

cc: Ross Rieke, Bridgewater Group  
Tom Roick, DEQ NWR  
Linda Scheffler, BES



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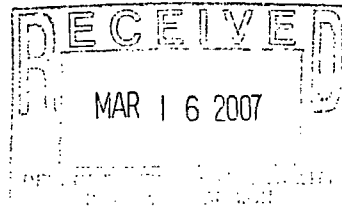


BRIDGEWATER GROUP, INC.

4500 SW Kruse Way, Suite 110  
LAKE OSWEGO, OR 97035  
TEL: (503) 675-5252  
FAX: (503) 675-1960  
rrieke@bridgeh2o.com

March 16, 2007

Mr. Tom Gainer  
Oregon Department of Environmental Quality  
2020 SW Fourth Ave., Suite 400  
Portland, OR 97201-4987



Subject: Crawford Street Corporation Site  
Storm Water Evaluation Plan

Dear Mr. Gainer:

Enclosed please find three copies of our March 16, 2006, *Preliminary Source Control Evaluation, Storm Water Evaluation Plan* (Plan) for the Crawford Street Corporation (CSC) site in Portland, Oregon. The plan has been revised from the November 22, 2006 plan based on comments received from the Oregon Department of Environmental Quality (DEQ) in a February 14, 2007 letter from DEQ. The following presents our responses to the specific DEQ comments as incorporated into the revised plan.

### **Response to DEQ's Comments**

For each comment response, DEQ's comment is first presented (in italics) with CSC's response following (indented and not italicized).

#### **DEQ Comment 1**

*Roof drainage from buildings on the subject property that discharge to the Willamette River by storm water conveyance pipe or overland flow should be evaluated since it can potentially convey site contaminants to the Willamette River. This potential pathway is being consistently evaluated at upland Portland Harbor sites and in some instances has shown to be a significant contaminant source, from the roofing materials and deposition of site contaminants on to the roof.*

CSC is confused regarding DEQ's request for sampling of the roof drains. Roofing materials are ubiquitous surfaces common to all developed urban properties, as is asphalt pavement. It is not standard practice to sample asphalt pavement surfaces based on the fact that asphalt contains PAHs and, thus, runoff from such pavement contains PAHs. Given this, it is not clear why is DEQ asking parties to sample roof runoff based on the potential presence of hazardous substances in the roofing materials.

If DEQ is requesting roof runoff sampling to characterize surface deposition from onsite activities, it seems impacts from onsite activities would be better represented by sampling and analysis of runoff from the site ground surface (i.e. proposed

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Mr. Tom Gainer  
DEQ  
March 16, 2007

samples SW-1, SW-2, and SW-3). Given its elevation off the ground and exposure to greater wind impacts, it seems like depositions on the roof would be more representative of regional air deposition mechanisms; not representative of site-specific releases.

The unusual nature of DEQ's request to sample roof drains is also reflected in the lack of inclusion of roof drains as a possible source of contamination to the Willamette River in the December 2005 Portland Harbor Joint Source Control document. A search of that document does not yield a single entry pertaining to roof drains.

CSC is interested in understanding the basis for roof drain sampling that has been requested (performed?) at other Portland Harbor sites. Please provide a list of sites where such sampling has been requested (performed?).

#### DEQ Comment 2

*The City indicates that roof and parking lot discharges appear routed to the City storm sewer which discharges to Outfall 52 (i.e., there are no discharges to "sanitary" sewer as indicated in the response to comments and Sampling and Analysis Plan). Stormwater sampling must be conducted at a location that receives runoff from the three areas of roof drainage indicated in Figure 2.*

See response to DEQ Comment 1.

#### DEQ Comment 3

*DEQ disagrees that sediment sampling from the Area E catch basins "would not be representative of storm water runoff from the Site given that no industrial operations are conducted in this small area." Sampling within Area E would appear to be representative of parking area runoff from the Site. In order to focus the investigation, DEQ is not requesting sampling of these catch basins at this time under the presumption that proposed sampling in other areas will be more representative of potential adverse impacts to stormwater.*

No CSC response necessary.

#### DEQ Comment 4

*The document implies that there is no overland flow from the South Area yard (i.e., drainage basins B and C, the central "3.6-acre infiltration area," and the "1.7-acre infiltration area" along the bluff) directly (i.e., perpendicularly) to the beach and the Willamette River. The DEQ understands that this conclusion was based on recent observations during a rain event; however, information from the site Preliminary Assessment (2/4/02) and Black Sand Removal activities (2/26/02) indicate possible storm water transport of upland black sand contamination to the adjacent beach. DEQ plans a site visit during a rain event to confirm that there is no overland flow directly to the river.*

Based on cursory observation of the southern edge of the site, it was previously inferred that storm water discharge occurred over the southern edge of the uplands, down the slope, and into the Willamette River. While the presence of black sand on the uplands and along the shoreline suggests that discharges may have occurred in

Mr. Tom Gainer  
DEQ  
March 16, 2007

the past from the southern edge of the uplands, there has been no direct observation of such storm water discharges since work started on the site in 2000. The September 21, 2006 sampling plan proposed a sampling point at the, then inferred, low point along the southern edge of the uplands (SW-2). A pavement slab at this point appeared to be a likely discharge point off the southern edge of the site based solely on the fact that the point appeared to be low point along the southern edge of the uplands.

Very heavy rainfall in Fall 2006 provided an opportunity to directly observe storm water runoff characteristics at the site. Such storm water runoff conditions were observed by Mat Cusma of CSC and Ross Rieke of Bridgewater Group over the course of several hours on the morning November 7, 2006. Heavy rainfall occurred during the site visit and over 1-inch of rainfall had occurred in the eight hours prior to the site visit with over ½-inch occurring in the four hours preceding the site visit. The entire length of the southern edge of the uplands was carefully walked by Mr. Rieke and Mr. Cusma and observed for storm water discharge. Photographs of the southern edge of the uplands taken during the site visit are attached. No discharge from the southern edge of the uplands was observed, including from the pavement slab at the previous sample point SW-2 (see Photograph 4).

DEQ is welcome to visit the site to observe storm water flow characteristics. Please notify CSC when DEQ desires to visit the site so that the property tenant can be notified, proper health and safety protocols followed, and CSC representatives can accompany DEQ.

#### DEQ Comment 5

*Sampling and Analysis Plan, Page 4. Response to DEQ Comment 6 indicates that catch basin sampling in the Columbia Forge operations area would not be representative, and little surface soil data has been collected at the site. To provide soil data representative of the potential storm water contribution to the Willamette River, surface soil should be sampled at proposed locations SW-1, SW-2, and SW-3. Samples should be analyzed for the site contaminants of interest, TOC, and grain size (Response to DEQ Comment 6 and 10). Analytical results should be compared to PEC screening level values in DEQ's Joint Source Control Strategy.*

Soil sampling along storm water flow pathways is considered a screening method to assess possible releases from the site via the storm water discharge pathway. The proposed sampling plan bypasses the indirect assessment provided by soil sampling and proposes direct sampling of the storm water itself. Notwithstanding the above, the sampling plan has been revised to include soil sampling at the three storm water sampling points (SW-1, SW-2, and SW-3).



**Photo No. 1**

**Photo Date: 11/7/06**

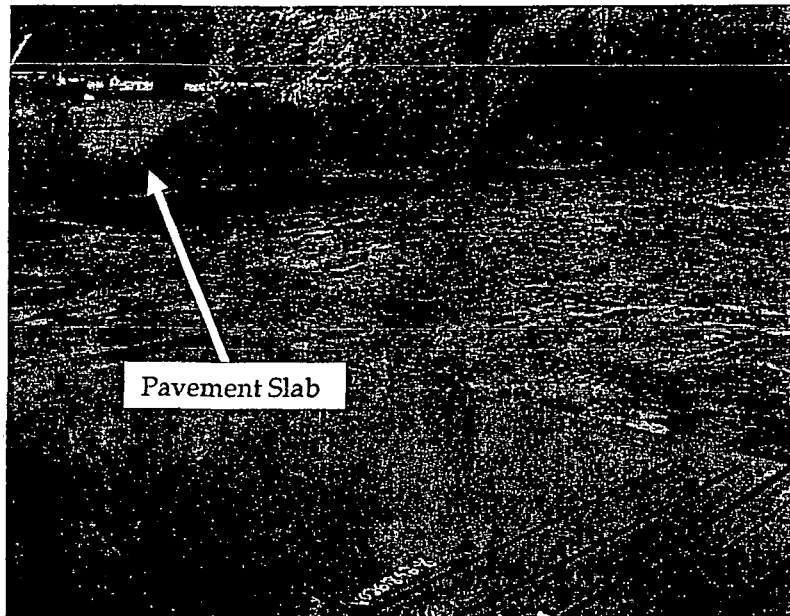
Looking northeast at southeast corner of uplands. Berms preventing discharge to south.



**Photo No. 2**

**Photo Date: 11/7/06**

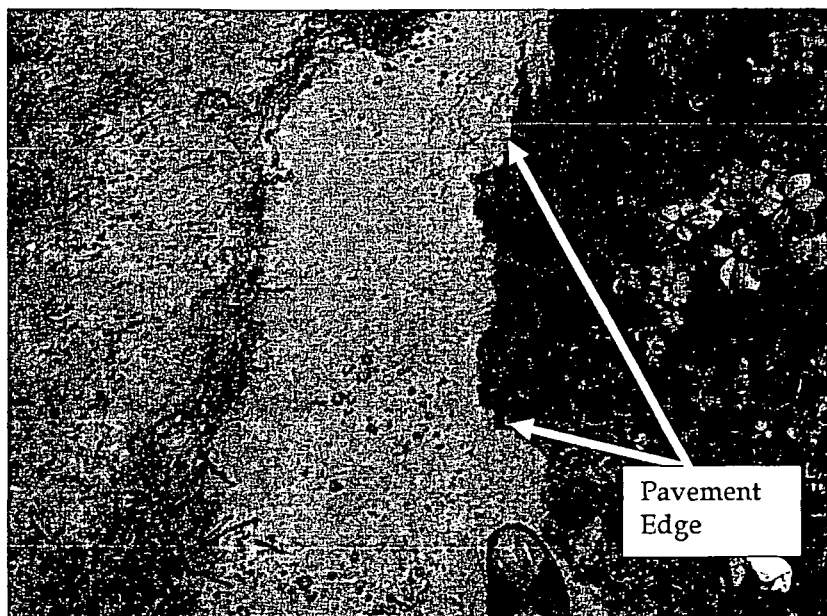
Looking east from southwest corner of uplands. Berms prevent discharge to south. Storm water flow toward photographer.



**Photo No. 3**

**Photo Date: 11/7/06**

Looking southwest at midpoint of southern edge of uplands. Pavement slab location of September 21, 2006 sampling plan sample point SW-2 (low point along southern edge of uplands).



**Photo No. 4**

**Photo Date: 11/7/06**

Pavement section edge. No discharge occurring from pavement section.



**Photo No. 5**

**Photo Date: 11/7/06**

Looking east from site midpoint on southern edge of uplands.



**Photo No. 6**

**Photo Date: 11/7/06**

Looking west from site midpoint on southern edge of uplands.

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Photo No. 7

Photo Date: 11/7/06

Looking north from site midpoint on southern edge of uplands.

**Scheffler, Linda**

---

**From:** GAINER Tom [GAINER.Tom@deq.state.or.us]  
**Sent:** Monday, March 26, 2007 10:18 AM  
**To:** Cusma, Matt; Ross Rieke  
**Cc:** GAINER Tom; ROICK Tom; Scheffler, Linda; TARNOW Karen E  
**Subject:** Stormwater  
**Importance:** High

Matt-

Thanks for submitting the March 16, 2007 stormwater *Sampling and Analysis Plan (SAP)* and the response to comments on the previous draft SAP. Although your responses to DEQ comments #1 and #2 concerning roof drains are inadequate, DEQ recommends immediate implementation of the March 16, 2007 SAP because it will address the primary stormwater concerns at the subject site and the current wet-weather season will likely end soon.

Stormwater roof drainage systems that discharge to the Willamette River are being sampled at other Portland Harbor sites, and site-related contaminants have been observed in such samples. The DEQ is interested in evaluating potential roof-top accumulation of site-related contaminants from site-related operations and not necessarily constituents related to the roofing materials. The DEQ considers a lack of such sampling of roof drainage as a data gap that may require further evaluation in the future.

Please contact me if you have questions, and to inform me of the sampling schedule.

Thanks-

**Tom Gainer, P.E.**

Project Manager/Environmental Engineer  
Oregon Department of Environmental Quality, NW Region  
503-229-5326

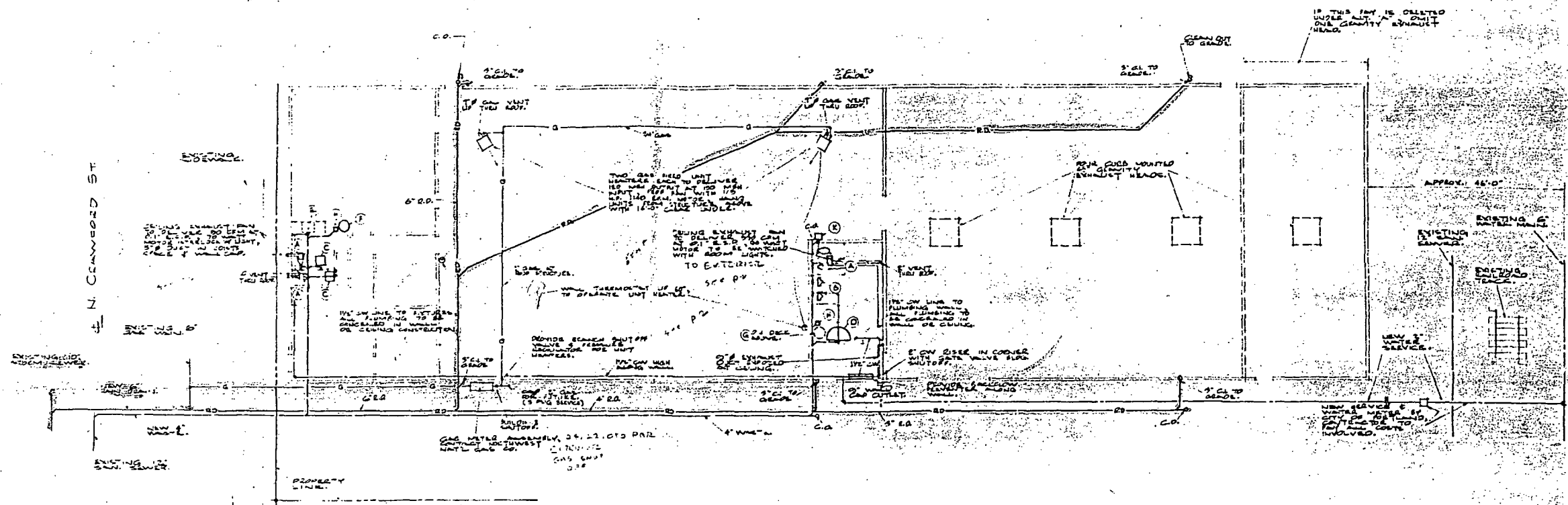
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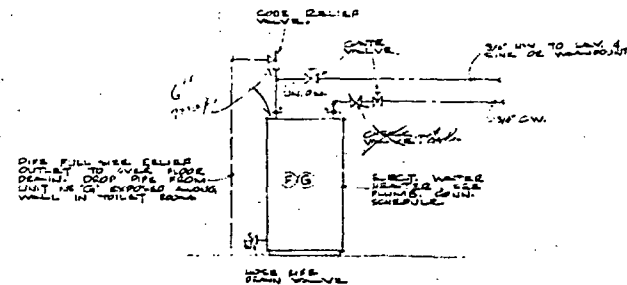
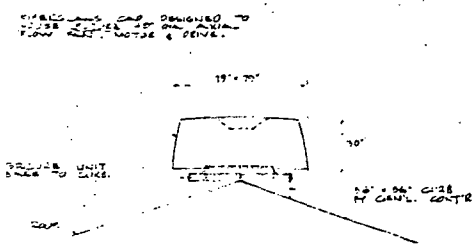
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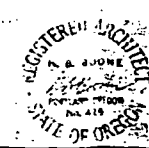
NORTH  
MECHANICAL  
PLAN

city copy



PLUMBING CONNECTION SCHEDULE			
NO.	DESCRIPTION	SIZE	LOCATION
1	1/2" WATER MAIN	1/2"	ENTRANCE
2	1/2" WATER MAIN	1/2"	ENTRANCE
3	1/2" WATER MAIN	1/2"	ENTRANCE
4	1/2" WATER MAIN	1/2"	ENTRANCE
5	1/2" WATER MAIN	1/2"	ENTRANCE
6	1/2" WATER MAIN	1/2"	ENTRANCE
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48	1/2" WATER MAIN	1/2"	ENTRANCE
49	1/2" WATER MAIN	1/2"	ENTRANCE
50	1/2" WATER MAIN	1/2"	ENTRANCE

FORGE & MACHINE BUILDING FOR THE SKOOKUM CO. INC. PORTLAND OREGON

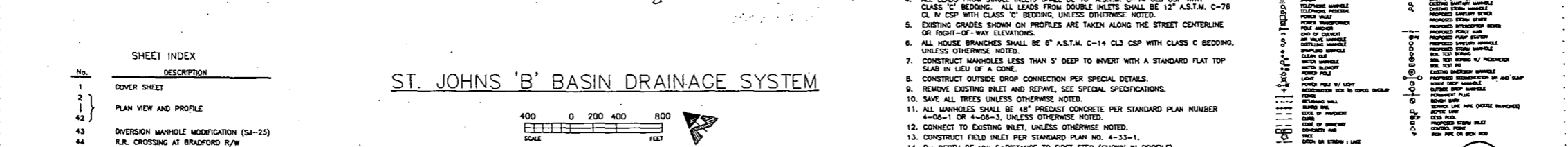
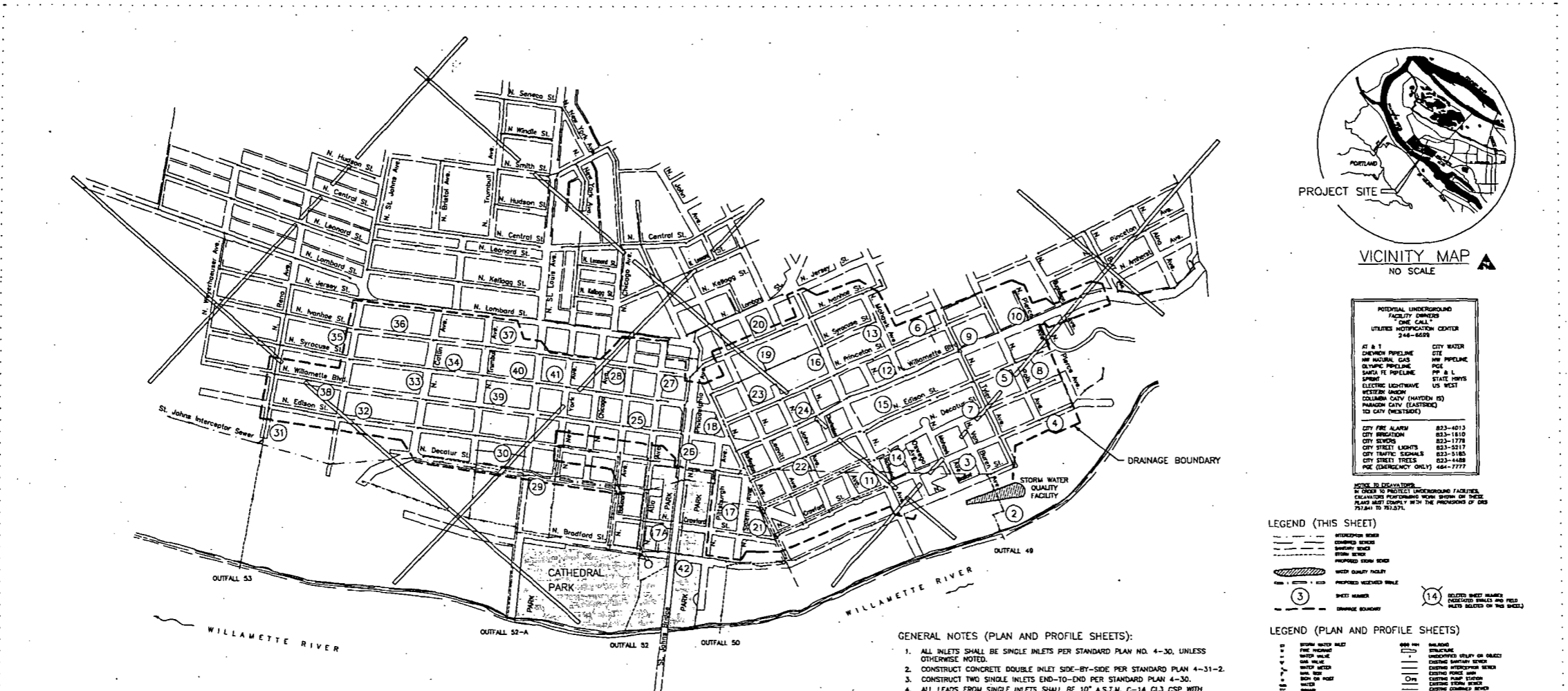


SKOOKUM CO. INC.	712-03
MECHANICAL PLAN & DETAILS	M1 OF 1
d. J. ARNOLD - BOONE BYRON & HOLLISTED 3022 S. W. TILLER AVENUE PORTLAND, OREGON 97201	


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PLOT AT 1=400, NO SCRIPT FILE NEEDED



45 DIVERSION MANHOLE (SU-17)  
 46 DETAILS WATER QUALITY FACILITY AT  
 N. VAN BUREN AVE.  
 47 SITE PLAN WATER QUALITY FACILITY AT  
 N. VAN BUREN AVE.

		WRITTEN USED _____ NOTATION: ANGLE _____ CONTRACTED BY: <u>ASTORIA Sewer</u> PROJECT COMPLETED: <u>8-11-1983</u> MAP CORRECTED BY: <u>Permanently checked by CS/ark</u> FINAL MAP DATA _____	DESIGNED BY: _____ DATE APP'D: _____ DRAWN BY: _____ CHECKED BY: _____ CONST. MGR.: _____ CADD MGR.: _____	CITY OF PORTLAND <b>ENVIRONMENTAL SERVICES</b> MIKE LINDBERG COMMISSIONER APPROVALS VICTOR RHODES, PE		ST. JOHNS <b>'B' BASIN DRAINAGE SYSTEM</b> COMBINATION SEWER SEPARATION PROJECT	Bureau of Environmental Services 1/4 SECTION VARIES JOB NO. _____ SHEET 5147 OF 47
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REVISION 3147001.00g. 07/20/99 01:05:14 CITY ENGINEER CITY ENGINEER REG. PROF. ENGR. NO. 8845

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Bureau of Environmental Services  
1/4 SECTION  
VARIES

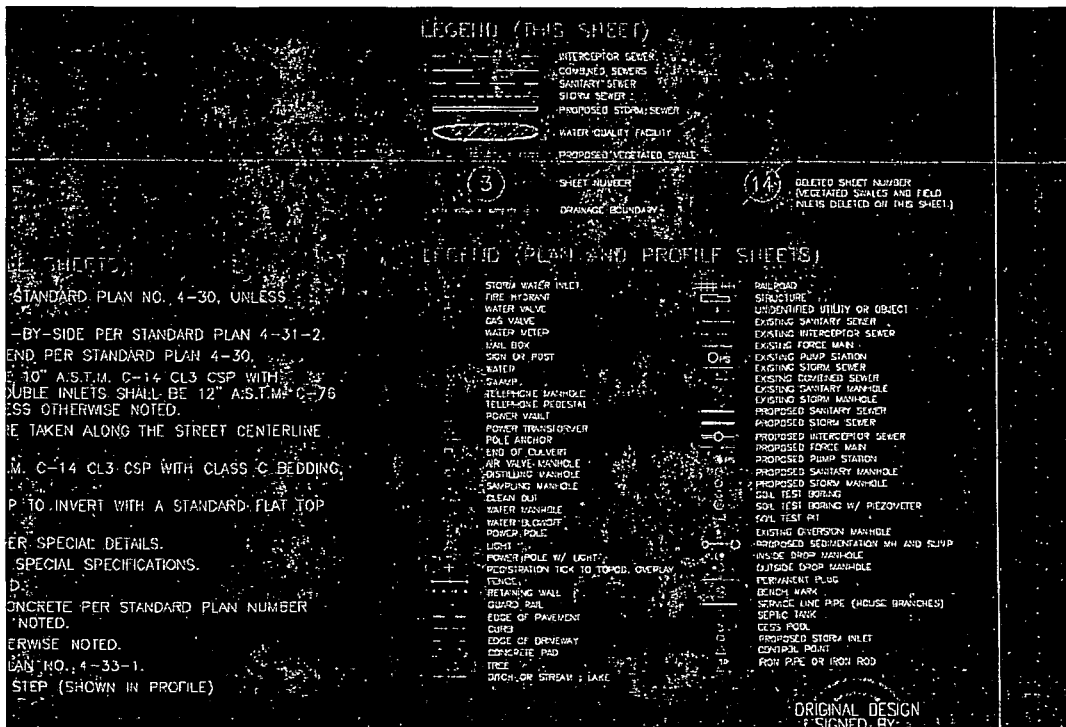
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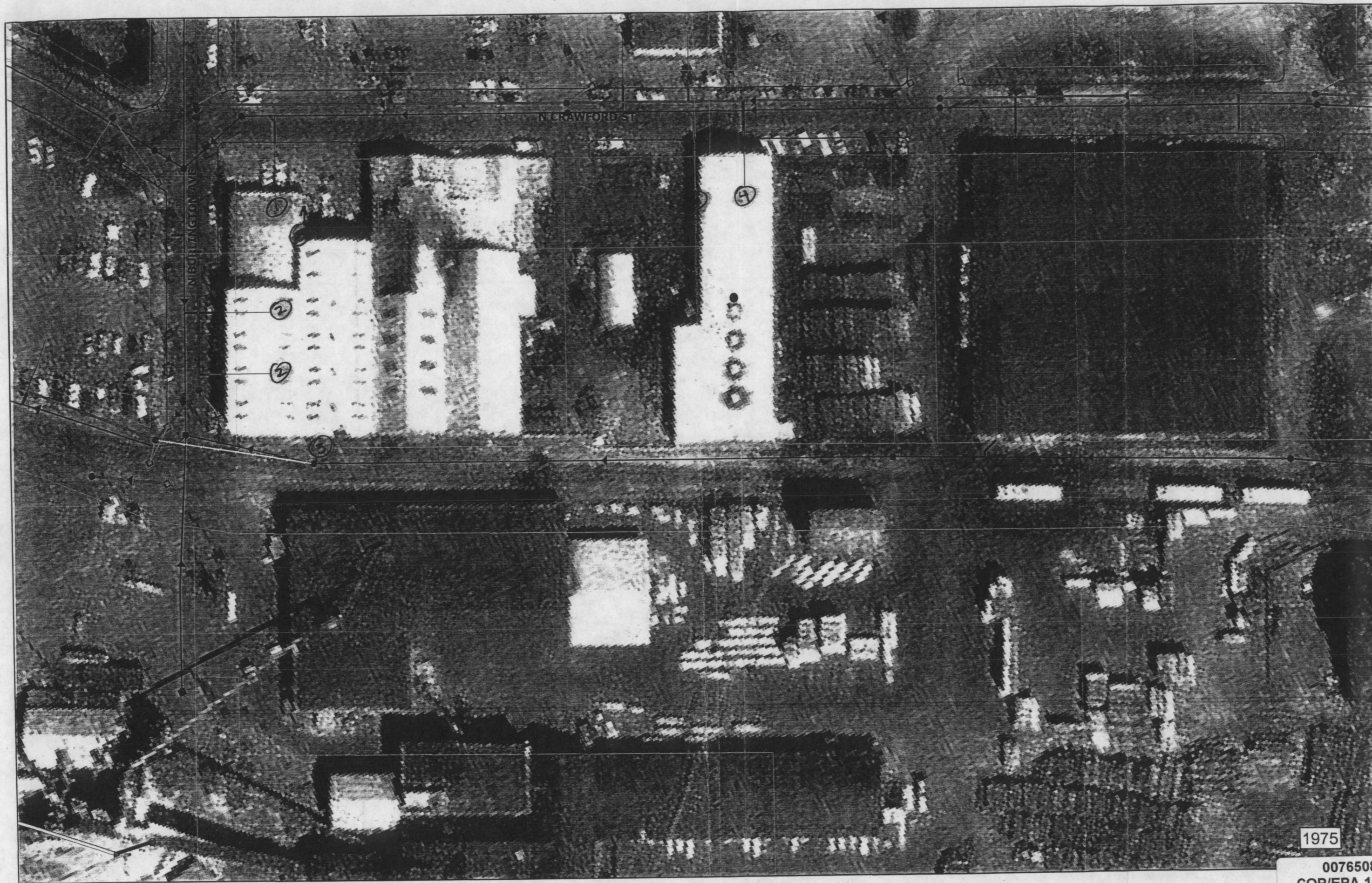
CITY OF PORTLAND  
ENVIRONMENTAL SERVICES  
ST. JOHNS

DRAWN BY: PROGRAM MGR  
 CONSTRUCTED BY: ALLIANCE CORP.  
 PROJECT COMPLETED: 8/1/1993  
 MAP CORRECTED BY: PERMITS CHECKED BY: CS/SLK  
 COMMISSIONER: ENAL-WAC-001A  
 CHECKED BY: CONST. MGR.  
 APPROVALS: MIKE LUNDBERG  
 ORIGINAL DESIGN: SIGNED BY: Paul Gibson for LAK No.15801  
 LUNDBERG SERVICES PRINCIPAL ENGINEER  
 REG. PROF. ENGR. NO. 15801  
 'B' BASIN DRAINAGE SYSTEM  
 COMBINATION SEWER  
 SHEET NO. 5147

NO.	DATE	DESCRIPTION	APPRO.	DESIGN MOD.	CADD MOD.		SEPARATION PROJECT	1 of 47
		REVISION				VICTOR RHODES, PE CITY ENGINEER		
				5147CD1.dwg, 07/28/99 at 09:14				
						CITY ENGINEER REG. PROF. ENGR NO. 6845		

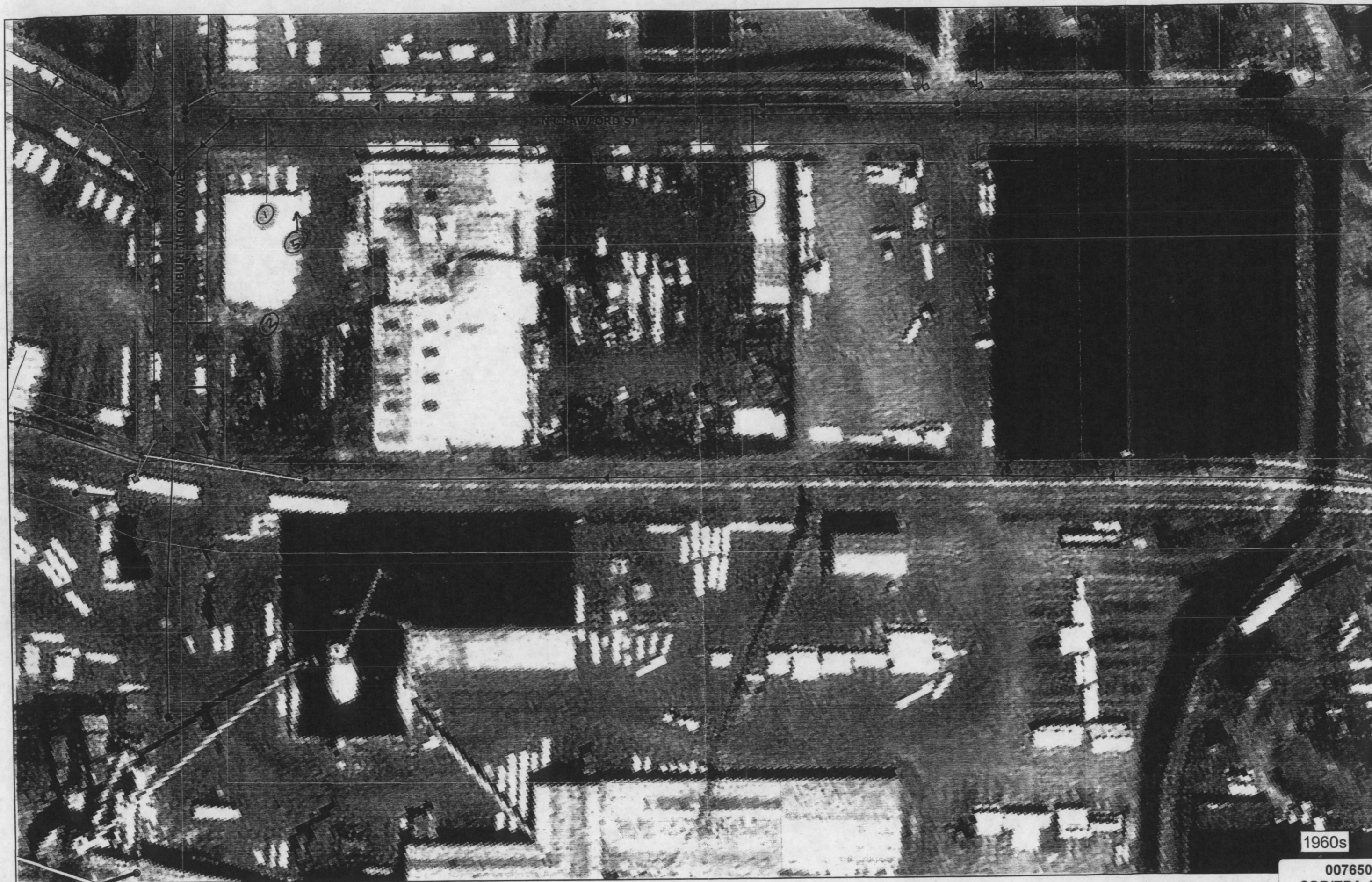
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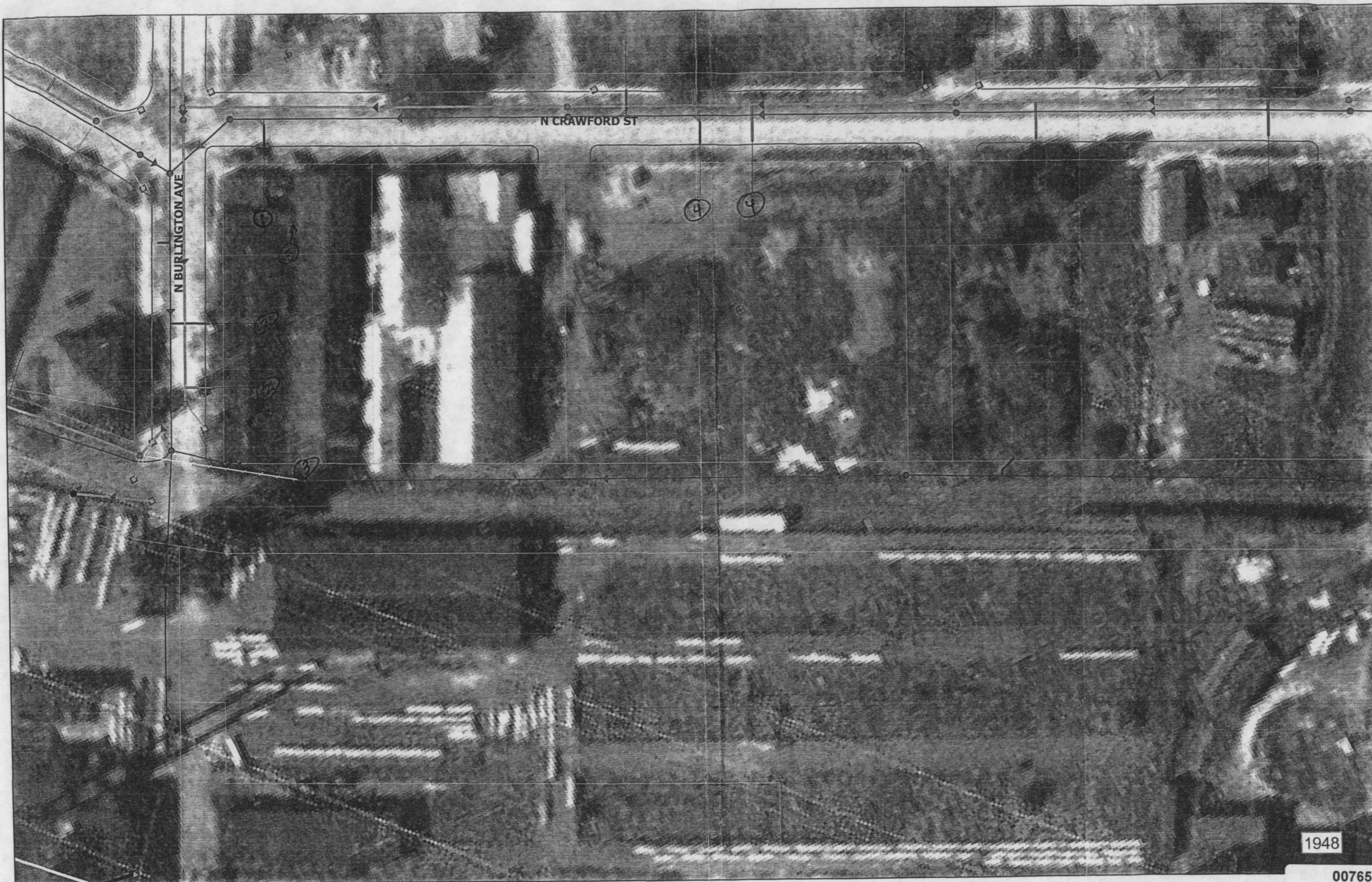
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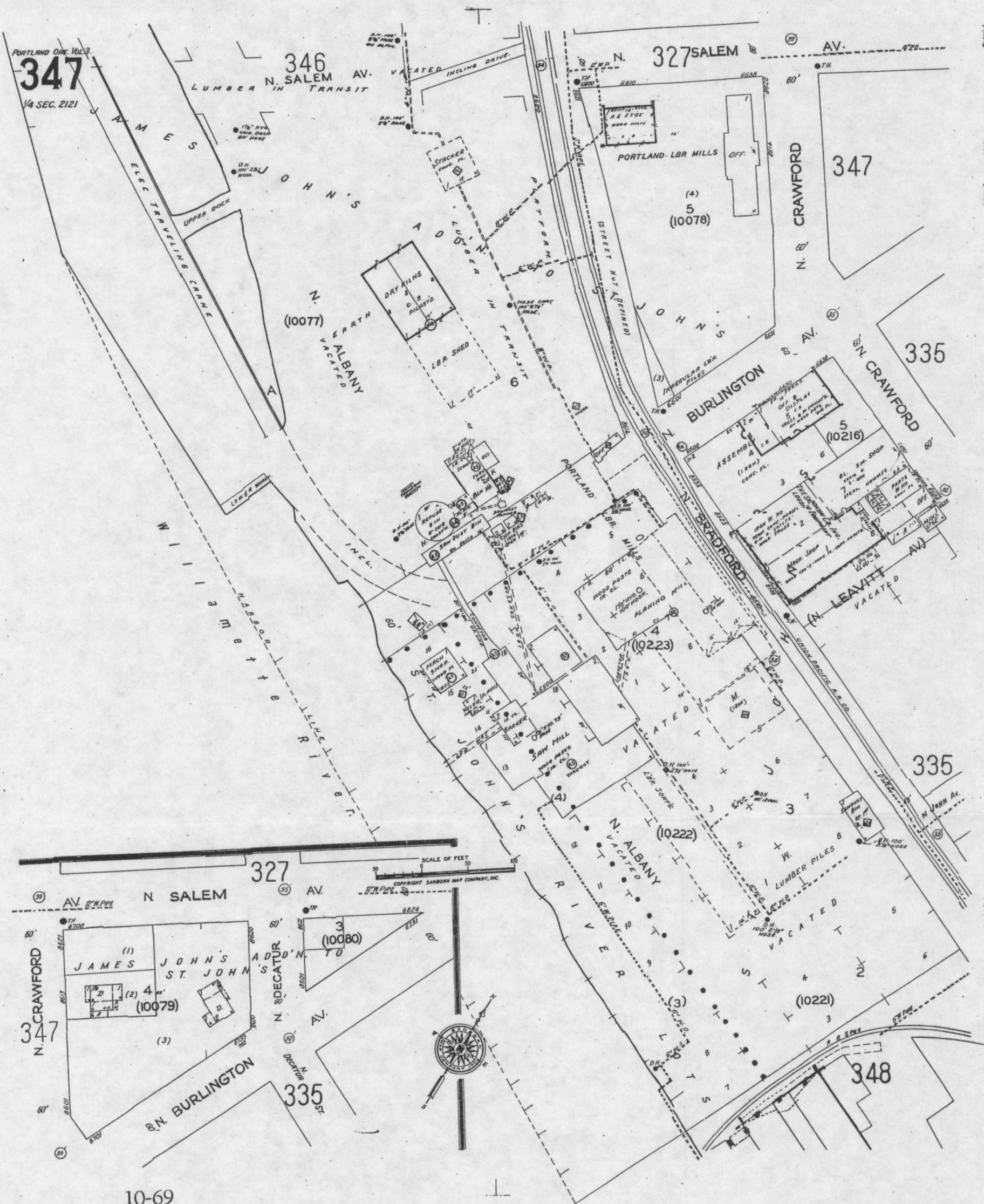
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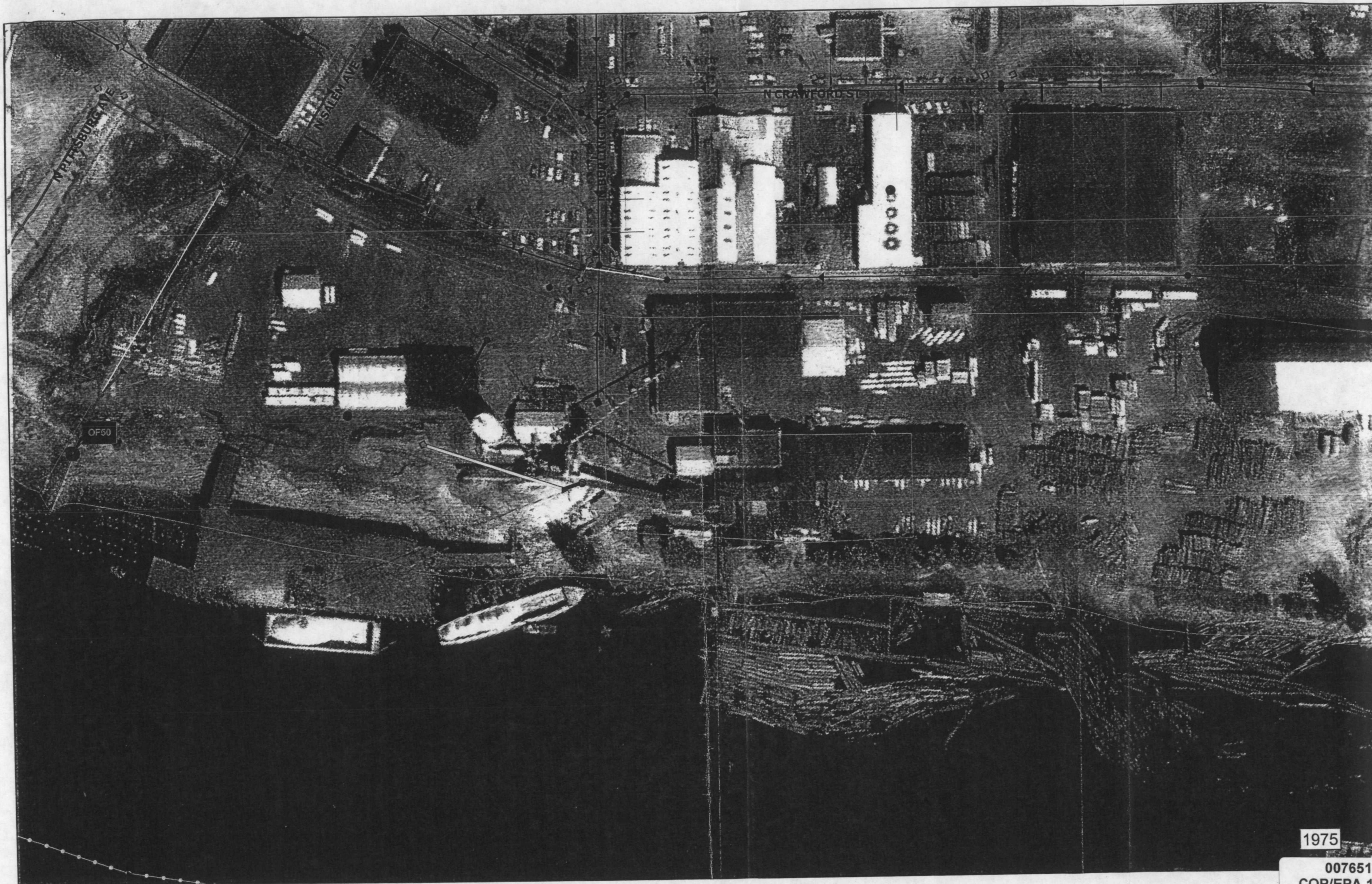


1948

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1975

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